AF 2025 – Ciber Situação – HCI – Microchip neuronal.

AF 2025 – A Ciber Situação.

Circuito cibernético de recolha-processamento-acção-feedback.

"Information is power, high ground will be information dominance". «*Information is power. Hence, the high ground of the future will be information dominance*»

Requisitos da Ciber Situação.

"achieve a complete battlespace picture and the ability to affect it instantly".

"observation through collection platforms, IIC, and the computer chip".

"It orients the user using the IIC, the archival databases, and the brain chip".

O objectivo da ciber-situação é o de «*achieve a complete battlespace picture and the ability to affect it instantly… The Cyber Situation… provides observation through the collection platforms, the IIC, and the computer chip. It orients the user using the IIC, the archival databases, and the brain chip*»

As cinco áreas tecnológicas da Ciber Situação.

"Collection platforms".

"Communications systems".

"Computer processing power".

"AI, intelligent software".

"Human systems and biotech…to make the man-computer interface seamless".

«*First, collection platforms should provide a detailed global awareness, giving decision makers a complete situational picture… Second, communications systems should advance to allow in-time access to virtually any available database. Communications will permit information flow around the loop. Third, computer-processing power and, fourth, intelligent software will provide the ability to integrate and correlate disparate types and sources of information and aid in decision making, contributing to the orient and decide functions. Fifth, human systems and biotechnology advancements will make the man-computer interface seamless. The end result should be an improved ability to access and direct weapons*»

Os cinco componentes da Ciber Situação.

"All-source information collectors".

"Archival databases".

"IIC, and integrated and interconnected constellation of smart satellites".

"Implanted microchips link to the IIC, to create computer-generated mental visualizations… allows the user to place himself into the selected battlespace".

"Weapons systems".

«*The Cyber Situation… includes five major components… all-source information collectors will transmit raw data to the Information Integration Center (IIC)… archival databases, linked to the IIC, will be used for historical analyses to fill information gaps… the IIC, an integrated and interconnected constellation of "smart" satellites will analyze, correlate, fuse, and deconflict all relayed data… implanted microscopic chips link users to the IIC and create computer-generated mental visualizations. The visualization encompasses the individual and allows the user to place himself into the selected battlespace*». Por fim, «*lethal and nonlethal weapons will be linked to the IIC, allowing authorized users to employ them from the Cyber Situation…*»

Detalhe sobre "All-source information collectors".

«*All-source information collectors will transmit raw data to the IIC… The collectors are linked by way of high-speed relay and dissemination systems. The collection platforms, in air and space, will be numerous and flexible… Components that feed information and support the IIC will be composed of many inexpensive sensors, emitters, microsats, and miniprojectiles*»

Detalhe sobre IIC.

«*The IIC acts both as a receiver and as a transmitter…The IIC is a constellation of integration or "smart" satellites that receives all-source information. Within the IIC, resident intelligent software will run decision support tools, correlate and fuse data into useful information, identify inconsistencies and information gaps, and task collectors to seek data to fill information gaps*»

Technology Areas Versus Cyber Situation Components

	Technology Areas				
Cyber Situation Component	Collection Platform	Communications Infrastructure	Computing Power	Intelligent Software	Human Systems & Biotechnology
All-source Information Collectors	X	X	X	X	
Archival Databases	X	X			
IIC		X	X	X	X
Implanted Microscopic Chip		X	X	X	X
Lethal & Nonlethal Weapons		X	X		

"Information Operations: A New War Fighting Capability" In Air Force 2025: Final Report (1996), Vol.3, Chapter 2. [Future study conducted 1995-1996 for the U. S. Air Force Chief of Staff"]

AF 2025 – Human-computer interface.

Controlo mental de máquinas.

«*Human computer interaction (HCI)… Eventually, it should include brain activated control. A goal is for many users able to interact over computer networks*»

"The HCI is a vital lead-in to the final technology area".

"…potential to create seamless flow of information between human and computer".

«*The human-computer systems integration is a vital lead-in to the final technology area. Human systems and biotechnology offers the potential to create a seamless flow of information between human and computer*»

Capacidades necessárias para HCI.

Compreender fluxo de informação de e para o SNC.

"A computer can be programmed to format information to be processed by the brain".

É necessário «*…understanding information flowing to and from the brain… Understanding how information enters the brain and how it is processed*» e também saber «*…how to present that data using visual-imaging techniques*»

«*In principle, data flowing out of the brain is in the form of electronic impulses which actuate the neurostructure within humans… Charting information flow into the brain and how the brain processes it once inside is even more difficult. This effort requires understanding how the brain formats the data to make decisions. Each human's information process is unique, based on such factors as experiences, learning, intelligence, and personal biases. Science is attempting to understand the commonalities between humans*»

"Information Operations: A New War Fighting Capability" In Air Force 2025: Final Report (1996), Vol.3, Chapter 2. [Future study conducted 1995-1996 for the U. S. Air Force Chief of Staff"]

AF 2025 – O microchip neuronal e a "ultimate virtual reality trip".

Microchip cerebral.

"The logical extension would be to place the HCI directly in the brain". «*…a computer can be designed and programmed to… format information which can be immediately processed by the brain. The logical extension would be to place the human computer interface directly in the brain*»

“Isto pode ser feito por meio de um chip neuronal”.

“…superimpose computer-generated information in front of one’s field of view”.

“…the “ultimate virtual reality trip”.

Depois é sugerido que isto pode ser feito por meio de um «*nerve chip... an electronic interface for individual nerve cells to communicate with a computer... If artificial eyes can convert video to nerve signals, won’t it be possible to use the same technique to superimpose computer-generated information in front of one’s field of view? This capability will have extraordinary… applications*». Por exemplo, vai «*enable individuals to achieve the “ultimate virtual reality trip”*»

“Information Operations: A New War Fighting Capability” In Air Force 2025: Final Report (1996), Vol.3, Chapter 2. [Future study conducted 1995-1996 for the U. S. Air Force Chief of Staff”]

AF 2025 – Questões éticas sobre o microchip neuronal.

<u>Como vender o valor ético de algo que controla o cérebro</u>.

“Implanting “things” in people raises ethical and public relations issues”.

“In 2025 these concerns may not be as alarming”.

“Society has come to accept most implants as a fact of life”.

“By 2025 the civilian populace will likely accept an implanted microscopic chip”.

«*Ethical and Public Relations Issues. Implanting “things” in people raises ethical and public relations issues. While these concerns may be founded on today’s thinking, in 2025 they may not be as alarming. We already are evolving toward technology implanting… Society has come to accept most… implants as a fact of life. By 2025… the civilian populace will likely accept an implanted microscopic chip that allow military members to defend vital national interests*»

“Information Operations: A New War Fighting Capability” In Air Force 2025: Final Report (1996), Vol.3, Chapter 2. [Future study conducted 1995-1996 for the U. S. Air Force Chief of Staff”]

AF 2025 – Microchip neuronal estabelece simbiose com utilizador.

<u>Nota humorística sobre “dependência mútua”</u>.

Quando o utilizador morre, o microchip também se desintegra.

Para não ser usado por adversários...quem é que no seu perfeito juízo quereria usar uma coisa destas!?

«*"Mutual Dependence"… Once implanted, the microscopic chip will operate only when the individual is alive because the chip creates mutual dependence on its host. In the unfortunate circumstance where a Cyber Situation user dies, the implanted microscopic chip becomes nonfunctional and disintegrates. This operational dependence of the chip upon its host prevents adversaries from using a chip from a deceased war fighter*»

"Information Operations: A New War Fighting Capability" In Air Force 2025: Final Report (1996), Vol.3, Chapter 2. [Future study conducted 1995-1996 for the U. S. Air Force Chief of Staff"]

AF 2025 – O microchip neuronal na Cyber Situation.

Microchip comunica directamente com IIC.

"…creates a computer-generated mental visualization".

"The visualization allows the user to place himself into the selected battlespace".

"…the user's mental visualization will be the most up-to-date information available".

Feedback imediato e flexibilidade operacional.

"Future operations will demand a highly flexible and mobile force".

"The chip will give these forces the ability to communicate, visualize, and prosecute military operations".

«*The implanted microscopic brain chip… relays the processed information from the IIC to the user [and] creates a computer-generated mental visualization based upon the user's request. The visualization encompasses the individual and allows the user to place himself into the selected battlespace… Since the IIC uses the most current data to create battlespace picture, the user's mental visualization will be the most up-to-date information available*»

«…future operations will demand a highly flexible and mobile force… The chip will give these forces the ability to communicate, visualize, and prosecute military operations»

"Information Operations: A New War Fighting Capability" In Air Force 2025: Final Report (1996), Vol.3, Chapter 2. [Future study conducted 1995-1996 for the U. S. Air Force Chief of Staff"]

ATTALI – O "Homem Novo".

(1992) O homem ideal, do bom selvagem, ao ariano, ao Golem. Em "1492", Attali fala-nos da procura pelo "homem ideal" – o ariano, o homem soviético, em séculos passados o bom selvagem. Diz-nos Attali (p. 266) «*...desde então [descoberta da América], o homem não mais deixou de querer encontrar um Homem novo, puro, ideal. Primeiro Índio, depois, quando o Índio desilude, imigrante ou ideólogo. E hoje Golem*»

Golem, o escravo morto vivo. Nas velhas tradições, o Golem é um escravo morto-vivo que obedece a todas as ordens do mestre. Ou seja, o homem obediente, conformado, integrado na máquina.

(2006) Elaboração de conceitos e preceitos: Ditadura global e genocídio.

"Um homem novo, digno de viver na hiperdemocracia".

"Liberto de todo o desejo e egoísmo".

«*Por fim, alguns homens políticos tentarão instaurar uma ditadura mais ou menos global destinada a fazer surgir um "homem novo", digno de viver na hiperdemocracia. Explicarão que, um dia, será até possível conceber seres tão senhores de si próprios que serão desprovidos do desejo de acumular, de desperdiçar, de cobiçar: seres felizes com a felicidade dos outros, programados para gostarem de ser aquilo que são, libertos de todo o desejo e de todo o egoísmo. Tudo isto, evidentemente, assassinando todos aqueles que, por razões de classe, de religião, ou qualquer outra, não serão dignos desta nova elite*» Attali (Pág. 260)

BILL JOY – GNR Tech – TH, Post-Industrial – Cenários Kaczynski.

Bill Joy (2000) – Os cenários de Theodore Kaczynski.

Bill Joy cita Theodore Kaczynski, o Unabomber – "Eu podia ter sido uma vítima".
«*…the author of this passage is Theodore Kaczynski - the Unabomber… I am no apologist for Kaczynski… Like many of my colleagues, I felt that I could easily have been the Unabomber's next target… Kaczynski quote from* ***The Age of Spiritual Machines****…*»

NOTA – O background de Kaczynski. Ted Kaczynski passou pelo programa de despersonalização da CIA, esteve envolvido em experiências MK-Ultra, e teve funções no aparato de segurança nacional. Os seus ataques enquanto Unabomber eram violentos, irracionais e desumanos, mas têm um padrão – atacam pessoas que Kaczynski sabia serem importantes na estrutura de conversão da sociedade humana no Borg transhumano; não eram alvos ao acaso. Quando Joy, o pioneiro DARPA, diz que poderia ter sido um alvo, está apenas a fazer uma admissão, confirmada ao longo de todo este artigo, onde nos explica placidamente que Kaczynski não estava enganado nas suas explanações e que, com efeito, é a sua 3ª opção que será, e está, a ser seguida.

Cenário – Humanos desenvolvem IA mais eficiente que humanos.

Humanos tornam-se obsoletos, todo o trabalho pode ser feito por IA.

«*First let us postulate that the computer scientists succeed in developing intelligent machines that can do all things better than human beings can do them. In that case presumably all work will be done by vast, highly organized systems of machines and no human effort will be necessary. Either of two cases might occur. The machines might be permitted to make all of their own decisions without human oversight, or else human control over the machines might be retained. If the machines are permitted to make all their own decisions, we can't make any conjectures as to the results, because it is impossible to guess how such machines might behave. We only point out that the fate of the human race would be at the mercy of the machines. It might be argued that the human race would never be foolish enough to hand over all the power to the machines. But we are suggesting neither that the human race would voluntarily turn power over to the machines nor that the machines would willfully seize power. What we do suggest is that the human race might easily permit itself to drift into a position of such dependence on the machines that it would have no practical choice but to accept all of the machines' decisions. As society and the problems that face it become more and more complex and machines become more and more intelligent, people will let machines make more of their decisions for them, simply because machine-made decisions will bring better results than man-made ones. Eventually a stage may be reached at which the decisions necessary to keep the system running will be so complex that human beings will be*

incapable of making them intelligently. At that stage the machines will be in effective control. People won't be able to just turn the machines off, because they will be so dependent on them that turning them off would amount to suicide. On the other hand it is possible that human control over the machines may be retained»

Controlo sobre sistemas estará nas mãos de uma pequena elite.

Esta elite, com técnicas melhoradas, terá maior controlo sobre as massas humanas.

As massas humanas ter-se-ão tornado supérfluas, um fardo sobre o sistema.

(1) Elite pode simplesmente optar por exterminar a maioria da humanidade.

(2) Podem usar técnicas bio e psicológicas para reduzir a taxa de natalidade.

(2a) A massa da humanidade extingue-se, o mundo fica para a elite.

«*In that case the average man may have control over certain private machines of his own, such as his car or his personal computer, but control over large systems of machines will be in the hands of a tiny elite - just as it is today, but with two differences. Due to improved techniques the elite will have greater control over the masses; and because human work will no longer be necessary the masses will be superfluous, a useless burden on the system. If the elite is ruthless they may simply decide to exterminate the mass of humanity. If they are humane they may use propaganda or other psychological or biological techniques to reduce the birth rate until the mass of humanity becomes extinct, leaving the world to the elite*»

(3) Elite pode optar pelo papel de "bons pastores" para o resto da humanidade.

(3a) Todas as necessidades físicas serão satisfeitas.

(3b) Crianças serão criadas sob condições psicológicas higiénicas [higiene mental].

(3c) Todos terão um hobby/ocupação que os mantenha ocupados.

(3d) Todos os insatisfeitos serão "tratados" para curar o "problema".

(3e) Haverá engenharia bio e psico para sublimar instintos em coisas "inofensivas".

(3f) A vida não terá propósito – será "feliz", mas sem liberdade.

(3g) Humanos ter-se-ão tornado animais de estimação.

«*Or, if the elite consists of soft-hearted liberals, they may decide to play the role of good shepherds to the rest of the human race. They will see to it that everyone's physical needs are satisfied, that all children are raised under psychologically hygienic conditions, that everyone has a wholesome hobby to keep him busy, and that anyone who may become dissatisfied undergoes "treatment" to cure his "problem." Of course, life will be so purposeless that people will have to be biologically or psychologically engineered either to remove their need for the power process or make them "sublimate"*

their drive for power into some harmless hobby. These engineered human beings may be happy in such a society, but they will most certainly not be free. They will have been reduced to the status of domestic animals» [Bill Joy. "Why the future doesn't need us". WIRED Magazine, 8.04, April 2000]

Falta um 4º cenário – a combinação de **todos** estes cenários, à escala global.

Bill Joy (2000) – George Dyson, evolução e extinção humana perante as máquinas.

Joy cita George Dyson, "Darwin Among the Machines".

"Humanos não sobreviverão evolutivamente à competição das máquinas".

«*…in his history of such ideas, Darwin Among the Machines, George Dyson warns: "In the game of life and evolution there are three players at the table: human beings, nature, and machines. I am firmly on the side of nature. But nature, I suspect, is on the side of the machines*» [Bill Joy. "Why the future doesn't need us". WIRED Magazine, 8.04, April 2000]

Bill Joy (2000) – Moravec, a economia pós-industrial robótica, extinção humana.

Joy cita Hans Moravec, especialista mundial em robótica, Carnegie Mellon.

"Robot: Mere Machine to Transcendent Mind".

"No curto prazo (início dos 2000s)".

"Num mercado completamente livre, robots superiorizar-se-ão a humanos".

"Espécies quase nunca sobrevivem encontros com competição superior".

"Máquinas substituirão humanos em quase todos os domínios da vida".

"Acção governamental pode suportar populações com frutos de trabalho maquinal".

"Porém, no longo termo, os humanos estão perante a perspectiva de extinção".

«*I found Hans Moravec's book Robot: Mere Machine to Transcendent Mind. Moravec is one of the leaders in robotics research, and was a founder of the world's largest robotics research program, at Carnegie Mellon University. Robot… material surprisingly supportive of Kaczynski's argument. For example: "The Short Run (Early 2000s)… Biological species almost never survive encounters with superior competitors. Ten million years ago, South and North America were separated by a sunken Panama isthmus. South America, like Australia today, was populated by marsupial mammals, including pouched equivalents of rats, deers, and tigers. When the isthmus connecting North and South America rose, it took only a few thousand years for the northern*

placental species, with slightly more effective metabolisms and reproductive and nervous systems, to displace and eliminate almost all the southern marsupials. In a completely free marketplace, superior robots would surely affect humans as North American placentals affected South American marsupials (and as humans have affected countless species). Robotic industries would compete vigorously among themselves for matter, energy, and space, incidentally driving their price beyond human reach. Unable to afford the necessities of life, biological humans would be squeezed out of existence. There is probably some breathing room, because we do not live in a completely free marketplace. Government coerces nonmarket behavior, especially by collecting taxes. Judiciously applied, governmental coercion could support human populations in high style on the fruits of robot labor, perhaps for a long while." A textbook dystopia - and Moravec is just getting wound up. He goes on to discuss how our main job in the 21st century will be "ensuring continued cooperation from the robot industries" by passing laws decreeing that they be "nice," and to describe how seriously dangerous a human can be "once transformed into an unbounded super-intelligent robot." Moravec's view is that the robots will eventually succeed us - that humans clearly face extinction» [Bill Joy. "Why the future doesn't need us". WIRED Magazine, 8.04, April 2000]

Bill Joy (2000) – Danny Hillis e a habituação gradual e progressiva a TH.

Cita Danny Hillis, fundador da Thinking Machines Corporation.

"Transferência de mente humana para uma máquina (fusão mente-máquina)".

"As mudanças serão graduais e as pessoas vão habituar-se a elas progressivamente".

"Se puder chegar aos 200 com um corpo de silicone, aceito".

«*…my friend Danny Hillis. Danny became famous as the cofounder of Thinking Machines Corporation, which built a very powerful parallel supercomputer. Despite my current job title of Chief Scientist at Sun Microsystems, I am more a computer architect than a scientist, and I respect Danny's knowledge of the information and physical sciences more than that of any other single person I know… Danny's answer - directed specifically at Kurzweil's scenario of humans merging with robots - came swiftly, and quite surprised me. He said, simply, that the changes would come gradually, and that we would get used to them. But I guess I wasn't totally surprised. I had seen a quote from Danny in Kurzweil's book in which he said, "I'm as fond of my body as anyone, but if I can be 200 with a body of silicon, I'll take it"*» [Bill Joy. "Why the future doesn't need us". WIRED Magazine, 8.04, April 2000]

Bill Joy (2000) – Os riscos das tecnologias GNR (1).

GNR – Robótica, engenharia genética, nanotecnologia.

Tecnologias GNR ameaçam tornar os humanos numa espécie em risco.

Robots, GMO, nanobots podem auto-replicar-se e isso é uma ameaça óbvia.

Auto-replicação descontrolada tem o risco de danos substanciais no mundo físico.

Todas podem trazer uma série de vantagens, mas também riscos gravosos.

As tecnologias NBC do século 20 eram WMDs militares restritas.

As teconologias GNR, por seu lado, são essencialmente comerciais.

Primeira vez que uma espécie se torna voluntariamente letal para si e outras.

«*Our most powerful 21st-century technologies - robotics, genetic engineering, and nanotech - are threatening to make humans an endangered species… robots, engineered organisms, and nanobots share a dangerous amplifying factor: They can self-replicate. A bomb is blown up only once - but one bot can become many, and quickly get out of control… Uncontrolled self-replication in these newer technologies runs a much greater risk: a risk of substantial damage in the physical world… Each of these technologies also offers untold promise: The vision of near immortality that Kurzweil sees in his robot dreams drives us forward; genetic engineering may soon provide treatments, if not outright cures, for most diseases; and nanotechnology and nanomedicine can address yet more ills. Together they could significantly extend our average life span and improve the quality of our lives. Yet, with each of these technologies, a sequence of small, individually sensible advances leads to an accumulation of great power and, concomitantly, great danger… The nuclear, biological, and chemical (NBC) technologies used in 20th-century weapons of mass destruction were and are largely military, developed in government laboratories. In sharp contrast, the 21st-century GNR technologies have clear commercial uses and are being developed almost exclusively by corporate enterprises… This is the first moment in the history of our planet when any species, by its own voluntary actions, has become a danger to itself - as well as to vast numbers of others*» [Bill Joy. "Why the future doesn't need us". WIRED Magazine, 8.04, April 2000]

Bill Joy (2000) – Os riscos das tecnologias GNR (2) – Caso a caso.

A perspectiva de robots inteligentes é realista e iminente.

Robot AI por 2030 – pode dar origem a espécie auto-replicada de robots.

Através da fusão homem-máquina, pode surgir imortalidade.

Também existe o risco do altamente destrutivo Borg, meio máquina, meio biológico.

«*…a realistic and imminent scenario for intelligent robots… How soon could such an intelligent robot be built? The coming advances in computing power seem to make it*

possible by 2030. And once an intelligent robot exists, it is only a small step to a robot species - to an intelligent robot that can make evolved copies of itself… A second dream of robotics is that we will gradually replace ourselves with our robotic technology, achieving near immortality by downloading our consciousnesses; it is this process that Danny Hillis thinks we will gradually get used to and that Ray Kurzweil elegantly details in The Age of Spiritual Machines (We are beginning to see intimations of this in the implantation of computer devices into the human body, as illustrated on the cover of Wired 8.02)… I was also reminded of the Borg of Star Trek, a hive of partly biological, partly robotic creatures with a strong destructive streak»

Engenharia genética traz risco de uma Peste Branca, acidental ou provocada.

«*…my own major concern with genetic engineering is narrower: that it gives the power - whether militarily, accidentally, or in a deliberate terrorist act - to create a White Plague*»

É mais fácil usar nanotech para fins destrutivos que para fins construtivos.

Nanotech tem óbvios usos militares e terroristas, potencial para destruir biosfera.

Este é o "gray goo problem", que pode devastar toda a vida na Terra por mero acidente.

«*It sent me back to Engines of Creation… Molecular electronics - the new subfield of nanotechnology where individual molecules are circuit elements - should mature quickly and become enormously lucrative within this decade, causing a large incremental investment in all nanotechnologies. Unfortunately, as with nuclear technology, it is far easier to create destructive uses for nanotechnology than constructive ones. Nanotechnology has clear military and terrorist uses, and you need not be suicidal to release a massively destructive nanotechnological device - such devices can be built to be selectively destructive, affecting, for example, only a certain geographical area or a group of people who are genetically distinct. An immediate consequence of the Faustian bargain in obtaining the great power of nanotechnology is that we run a grave risk - the risk that we might destroy the biosphere on which all life depends. As Drexler explained: ""Plants" with "leaves" no more efficient than today's solar cells could out-compete real plants, crowding the biosphere with an inedible foliage. Tough omnivorous "bacteria" could out-compete real bacteria: They could spread like blowing pollen, replicate swiftly, and reduce the biosphere to dust in a matter of days. Dangerous replicators could easily be too tough, small, and rapidly spreading to stop - at least if we make no preparation. We have trouble enough controlling viruses and fruit flies. Among the cognoscenti of nanotechnology, this threat has become known as the "gray goo problem." Though masses of uncontrolled replicators need not be gray or gooey, the term "gray goo" emphasizes that replicators able to obliterate life might be less inspiring than a single species of crabgrass. They might be superior in an evolutionary sense, but this need not make them valuable. The gray goo threat makes one thing perfectly clear: We cannot afford certain kinds of accidents with replicating assemblers. Gray goo would surely be a depressing ending to*

our human adventure on Earth, far worse than mere fire or ice, and one that could stem from a simple laboratory accident» [Bill Joy. "Why the future doesn't need us". WIRED Magazine, 8.04, April 2000]

Bill Joy (2000) – Os riscos das tecnologias GNR (3) – Controlos.

GNR exigem regime de verificação similar a bio-armas, a uma escala sem precedentes.

Isto coloca em causa valores como privacidade e informação proprietária.

Esta perda de privacidade e liberdade de acção vai encontrar forte resistência.

Necessário um código de ética forte para os tecnologistas envolvidos.

NOTA – O estado policial existe, mas **não é** sobre GNR, mas sim cidadania comum.

«*The GNR technologies… With their widespread commercial pursuit, enforcing relinquishment will require a verification regime similar to that for biological weapons, but on an unprecedented scale. This, inevitably, will raise tensions between our individual privacy and desire for proprietary information, and the need for verification to protect us all. We will undoubtedly encounter strong resistance to this loss of privacy and freedom of action… Verifying the relinquishment of certain GNR technologies will have to occur in cyberspace as well as at physical facilities. The critical issue will be to make the necessary transparency acceptable in a world of proprietary information, presumably by providing new forms of protection for intellectual property. Verifying compliance will also require that scientists and engineers adopt a strong code of ethical conduct, resembling the Hippocratic oath, and that they have the courage to whistleblow as necessary, even at high personal cost… In the 21st century, this requires vigilance and personal responsibility by those who would work on both NBC and GNR technologies to avoid implementing weapons of mass destruction and knowledge-enabled mass destruction*» [Bill Joy. "Why the future doesn't need us". WIRED Magazine, 8.04, April 2000]

Bill Joy (2000) – Apresenta o modelo global para a 3ª opção de Kaczynski.

Imortalidade é o sonho utópico original [a árvore proibida à saída do Jardim].

Joy cita Attali, para mencionar outros sonhos utópicos.

Liberdade, Igualdade, Fraternidade.

Fraternidade liga felicidade individual à alheia, e traz a "promessa de auto-sustento".

«*Neither should we pursue near immortality without considering the costs, without considering the commensurate increase in the risk of extinction. Immortality, while*

perhaps the original, is certainly not the only possible utopian dream. I recently had the good fortune to meet the distinguished author and scholar Jacques Attali, whose book Lignes d'horizons (Millennium, in the English translation) helped inspire the Java and Jini approach to the coming age of pervasive computing, as previously described in this magazine. In his new book Fraternités, Attali describes how our dreams of utopia have changed over time: "At the dawn of societies, men saw their passage on Earth as nothing more than a labyrinth of pain, at the end of which stood a door leading, via their death, to the company of gods and to Eternity. With the Hebrews and then the Greeks, some men dared free themselves from theological demands and dream of an ideal City where Liberty would flourish. Others, noting the evolution of the market society, understood that the liberty of some would entail the alienation of others, and they sought Equality." Jacques helped me understand how these three different utopian goals exist in tension in our society today. He goes on to describe a fourth utopia, Fraternity, whose foundation is altruism. Fraternity alone associates individual happiness with the happiness of others, affording the promise of self-sustainment»

Uma base ética para Fraternidade – ideias do Dalai Lama são úteis.

Amor, compaixão, interdependência, responsabilidade universal – indivíduo, sociedade.

Dalai Lama – A felicidade não vem com progresso material ou conhecimento.

Existem limites à ciência e à tecnologia – Há que encontrar desafios significativos.

Joy – também precisamos de outlets alternativos para as nossas forças criativas.

Isto para além da cultura de crescimento económico perpétuo.

Todos nós temos pequenas coisas às quais nos dedicarmos, para canalizar energias.

«*Where can we look for a new ethical basis to set our course? I have found the ideas in the book Ethics for the New Millennium, by the Dalai Lama, to be very helpful. As is perhaps well known but little heeded, the Dalai Lama argues that the most important thing is for us to conduct our lives with love and compassion for others, and that our societies need to develop a stronger notion of universal responsibility and of our interdependency; he proposes a standard of positive ethical conduct for individuals and societies that seems consonant with Attali's Fraternity utopia… The Dalai Lama further argues that we must understand what it is that makes people happy, and acknowledge the strong evidence that neither material progress nor the pursuit of the power of knowledge is the key - that there are limits to what science and the scientific pursuit alone can do… Clearly, we need to find meaningful challenges and sufficient scope in our lives if we are to be happy in whatever is to come. But I believe we must find alternative outlets for our creative forces, beyond the culture of perpetual economic growth… Each of us has our precious things, and as we care for them we locate the essence of our humanity*» [Bill Joy. "Why the future doesn't need us". WIRED Magazine, 8.04, April 2000]

BRAINCHIPS.

Experiências com deficientes motores. Experiências com deficientes motores permitem fazer interagir o cérebro dos mesmos com computadores. Portanto, está a ser vendido, como restaurando o movimento e o discurso de pessoas com deficiência. Experiências deste género já tinham sido feitas com animais, como macacos.

Intel, implementação através do mercado. Intel Wants Brain Implants in Its Customers' Heads by 2020

Artigos. Brain chip reads man's thoughts; Brain chip research aims for future movement; Brain chip heralds neurotech dawn; Brain chip offers hope for paralyzed; CNN.com - Brain Chips; LiveScience - Brain Chip Alters the Mind; Harnessing The Power Of The Brain; Surfing the Web with nothing but brainwaves; Newsclip - could bionic eye end blindness; Neural implants will treat tremors, paralysis, and even memory loss; Brain-controlled computer switches on in a heartbeat; Caltech, Neural Implants, The Bionic Age Begins; Brain Chips - Artificial Intelligence Is All in Your Head (vários módulos: eliminar depressão; aumentar prazer sexual; aumentar capacidades perceptuais e cognitivas; ligação mental à Internet e telepatia artificial); Chips Coming to a Brain Near You (excelente imagem); *WTEC - International Assessment of Research and Development in Brain-Computer Interfaces*; *US report foretells of brave new world*; Scientists - Humans and machines will merge in future; Artificial Intelligence Will Leap Humans by 2020; Futurist Thinking at the Pentagon; Changing Images of Man

Artigos – memória. NY Times - Brain chip, Memory; Scientists develop 'brain chip'

Artigo – "Sex chip". 'Sex chip' being developed by scientists

Artigo – Chip IA que aprende com hospedeiro. Researchers develop neural implant that learns with the brain

CNN – Promo aos brain chips.

Em 75 anos, pessoas serão ciborgues parciais, interconectadas com chips cerebrais.

O comportamento torna-se controlável por terceiros.

Pensamentos podem ser downloaded por prestadores de serviços.

«*A new CNN article predicts that within 75 years people will have embedded microchips within their brain that* ***will allow their behavior to be controlled by a third party****… the idea of humans becoming part cyborg by having communications devices*

*implanted in their body… **“Thoughts connect instantly when people dial to “call” each other. But there’s one downside: “Advertisements” can occasionally control the user’s behavior because of an impossible-to-resolve glitch. If a user encounters this glitch — a 1 in a billion probability — every piece of data that his brain delivers is uploaded to companies’ servers so that they may “serve customers better”*** » “CNN: Your Behavior Will Be Controlled by a Brain Chip”, Paul Joseph Watson, Infowars.com, October 9, 2012

BRUCE LEVINE – Psicotrópicos – Apatia e zombificação.

"It zombifies the population, out of Brave New World".

(**BL – 42:00**) How does that zombify a population...it's literally out of the pages of brave new world.

"Make you more controllable, apathetic".

(**BL – 44:30**) Drugs that affect our neurotransmitters. They certainly make you more manageable and controllable. All these psychotropics, what they all have in common is that they disconnect from what you're really feeling. "I think I used to care, but I don't feel it as much. It takes the edge off positive and negative emotions. They call that successful treatment. For guys like me this is brave new world.

BRZEZINSKI – Controlo tecnotrónico do cérebro – HAARP.

Na era tecnotrónica, manipulação electrónica e por persuasão em massa. Bzrezinski, em Between Two Ages, fala da era tecnetrónica, em que o cérebro pode ser controlado por meios electrónicos e por persuasão em massa.

Sistemas HAARP podem menorizar funções mentais de populações inteiras.

«*In addition, it may be possible--and tempting--to exploit for strategic-political purposes the fruits of research on the brain and on human behavior.* ***Gordon J. F. MacDonald, a geophysicist specializing in problems of warfare, has written that timed artificially excited electronic strokes could lead to a pattern of oscillations that produce relatively high power levels over certain regions of the earth.... In this way, one could develop a system that would seriously impair the brain performance of very large populations in selected regions over an extended period****...*»

Zbigniew Brzezinski, Between Two Ages, America's Role In The Technetronic Era (1970)

DARPA – Lifelog – Neurotech.

DARPA – Lifelog.

Programa subcontratado. O programa foi partido às parcelas e subcontratado a empresas privadas, universidades e institutos.

Registo e indexação de toda a vida de um indivíduo. Registo de todos os aspectos da vida dos indivíduos. Reunir todos os pedaços concebíveis da vida de uma pessoa, indexá-los e torná-los pesquisáveis. O LifeLog reuniria numa única base de dados todos os emails alguma vez enviados ou recebidos, todas as fotografias algumas vez tiradas, cada página surfada, todas as chamadas telefónicas feitas.

Sensores audio-visuais. Sensores audio-visuais, para capturar tudo o que alguma vez é dito ou visto.

GPS regista movimentos. Tudo isto (e muito mais) seria combinado com vigilância GPS, para manter registos dos movimentos da pessoa.

Monitores biomédicos. Controlam sinais vitais e índices de saúde do indivíduo.

Artigos. Lifelog - Darpa wants your life indexable and searchable; Lifelog, The military wants to log your life experiences; LifeLog - A spy machine of DARPA's dreams; Lifelog - New camera promises to capture your whole life; Lifelog is now MyLifeBits and SenseCam

DARPA – Neurotech (EM).

DARPA e múltiplos institutos, empresas, universidades. A figura central neste millieu é a DARPA, Defense Advanced Research Projects Agency, e muitas empresas, institutos e universidades que são contratados, pelo planeta fora.

DARPA. Defense Advanced Research Projects Agency.

R&D para o Pentágono. Trabalha para desenvolver os projectos tecnológicos mais sofisticados do Pentágono.

BMI, i.e., próteses neurais. Interfaces mente-máquina. Permitem a humanos controlar máquinas através do pensamento.

"Cognitive feedback helmets". Permitem monitorização remota do estado mental de uma pessoa.

Andróides biológicos – "robots vivos". Cujos movimentos podem ser controlados através de implantes cerebrais. Tecnologia já testada em ratos e, claro, humanos.

Neuroimagética, para uso em interrogação e em screenings. Tecnologia MRI para "brain fingerprinting". Ou seja, scans cerebrais involuntários. O pretexto dado é que vai ser usado em aeroportos, para identificar terroristas.

EM pulse weapons. Armas de pulsão EM ("pulse weapons") e outros neurodisruptores. Para perturbar e baralhar processos de pensamento das vítimas.

DARPA – Neurotech (EM) – Neurotech com base em EM. Todos estes projectos e tecnologias se baseiam nalgumas premissas essenciais

Actividade cerebral expressa em EM. A actividade cerebral é expressa em actividade electromagnética.

Interferir com EM implica leitura e identificação de padrões – e interface. Para interferir com essa actividade EM, basta saber como ler e identificar padrões de resposta. É preciso saber como interferir, em interface, com essa actividade.

DARPA – Neurotech (Drogas).

"Neuroweapons" – Neurotoxinas. Armas neurológicas, usando agentes biológicos para excitar a libertação de neurotoxinas.

"Neuroweapons" – Drogas psicoactivas. Inibitórias e excitantes. [VER FFW]

DCDC 2040 – Transhumanismo.

DCDC 2040 – "Extending cognition via new technologies".

Extensão cognitiva através de novas tecnologias.

BMI e próteses cognitivas para sentidos, memória, aprendizagem.

Podem ser modulares, ou um sistema cognitivo inteiro.

Drogas: aumentar cognição – detectar intenção – manipular sentidos – instalar medo, fatiga.

«*Extending cognition via new technologies, potentially through direct, seamless brain-machine interfaces, is likely to be facilitated through 'cognitive prostheses' that either augment or enhance vision, language, auditory, learning and memory capabilities. These devices will seem like modular 'plugins', and at other times, an entire cognitive system. Examples may include a 'bionic eye' using an electronic contact lens as a display or a medical sensor, or brain implants with electronic chips to aid memory and restore other cognitive functions. In addition, notwithstanding the potential ethical and legal issues, future drugs may be used to enhance the cognitive faculties of people, provide the ability to detect and identify potential intent, and manipulate the cognition senses to install the effects of fatigue or fear*» "Global Strategic Trends – Out to 2040". Development, Concepts and Doctrine Centre (DCDC) (2010) U.K. Ministry of Defence, Strategic Trends Programme. Fourth Ed.

DCDC 2040 – Humanos fundidos com máquinas.

Humanos inadaptados podem tornar-se redundantes.

Substituídos por AI, ou upgraded através de aumentação tecnológica. «*As the pace of technological change increases and the difficulties of fusing several technologies are overcome, humans unable to cope may become redundant and be replaced by intelligent machines, or upgraded through technology augmentation*»

"Global Strategic Trends – Out to 2040". Development, Concepts and Doctrine Centre (DCDC) (2010) U.K. Ministry of Defence, Strategic Trends Programme. Fourth Ed.

DELGADO (1969) – “A sociedade psicocivilizada”.

Delgado (1969) – Manipular mente para “sociedade psicocivilizada”.

Fala em manipular a «*structure, function, and purpose*» da mente.

“…what the mind is, its physical control, outlook for a psychocivilized society”. «*The following pages contain a discussion of what the mind is, the technical problems involved in its possible control by physical means, and the outlook for development in a future psychocivilized society (p. 19-20)*

J. Delgado (1969). Physical Control of the Mind: Toward a Psychocivilized Society.

Delgado (1969) – Usar ESB para comportamento, emoções.

Delgado está a trabalhar na lobotomia definitiva – controlo físico de longa distância de cérebros individuais.

«*Electrical Activation of the Will*», «*Electrical Stimulation of the Brain*».

Promove o ideal de controlar remotamente os cérebros de seres humanos.

“Será que a mente pode ser controlada por estimulação eléctrica?”. «*…we have the possibility of investigating experimentally some of the classic problems of mind-brain correlations. In addition to new answers, implanting of electrodes has introduced new problems: is it feasible to induce a robotlike performance in animals and men by pushing buttons at a cerebral radio stimulator? Could drives, desires and thoughts be placed under the artificial command of electronics? Can personality be influenced by ESB? Can the mind be physically controlled… (p. 97)*

“…we may control living organisms from a distance… under the influence of electrical impulses”. «*These accomplishments should familiarize us with the idea that we may also control the biological functions of living organisms from a distance. Cats, monkeys, or human beings can be induced to flex a limb, to reject food, or to feel emotional excitement under the influence of electrical impulses reaching the depths of their brains through radio waves purposefully sent by an investigator… (p. 75)*

“Usar um sistema de comunicação rádio entre sujeito e computador...”.

“Controlar estados emocionais através de impulsos eléctricos”. «*A two-way radio communication system could he established between the brain of a subject and a computer… anxiety, depression, or rage could be recognized in order to trigger stimulation of specific inhibitory structures… (p. 201)*

“ESB pode activar e influenciar mecanismos cerebrais e comportamento”. «*We may conclude that ESB can activate and influence some of the cerebral mechanisms involved in willful behavior. In this way we are able to investigate the neuronal functions related to the so-called will, and in the near future this experimental approach should permit clarification of such highly controversial subjects as “freedom”, “individuality,” “spontaneity” in factual terms rather than in elusive semantic discussions. The possibility of influencing willful activities by electrical means has obvious ethical implications, which will be discussed later…* (p. 189)

Generais e exércitos controlados por ESB, para prevenir violência. Oferece uma visão de generais e exércitos controlados por «*Electrical Stimulation of the Brain*», no interesse de «*preventing violence*», naturalmente (p. 176)

Delgado descreve experiências realizadas em macacos. Delgado descreve experiências com macacos, mas é mais contido em mencionar experiências com seres humanos. Em grupos de macacos, foi capaz de activar seguidores para depor líderes, e activar líderes a tornarem-se mais agressivos contra os seus seguidores.

J. Delgado (1969). Physical Control of the Mind: Toward a Psychocivilized Society.

Delgado (1969) – Montar aparato estatal e mediático psico-totalitário.

É preciso agências, planos, orçamentos e acções. «*National agencies should be created in order to coordinate plans, budgets, and actions just as NASA in the United States has directed public interest and technology, launching the country into the adventures and accomplishments of outer space (p. 259)*

Mobilizar massa media para doutrinar [“sensibilizar”] público para necessidade de controlar a mente. «*The mass media must be mobilized for this purpose, and preparation of entertaining and informative programs should be encouraged and promoted by the neurobehavioral institutes… (p. 282)*

J. Delgado (1969). Physical Control of the Mind: Toward a Psychocivilized Society.

Delgado (1969) – Sofística para justificar psico-totalitarismo.

Delgado é o teórico dos lobotomistas, o grande apologista de psico-totalitarismo.

Gosta de sofística sobre a inexistência e desinteresse de liberdade e individualidade.

Individualidade “não existe, é circunstancial”.

“…the existence of one should be considered in terms of mankind…”.

[É claro que aí são cientistas sociais, que definem o que é “humanamente” válido].

A seguir vira a arma contra a democracia liberal em si.

"...based on the assumption that each human being is born free and has the right to develop his own mind… independent and self sufficient".

"This orientation has great appeal, but its assumptions are not supported by studies of intracerebral mechanisms".

«*Individual uniqueness is merely the unique chance in the acquisition, combination, and modulation of available elements, and the relative central axis is not the individual but the elements originating in the outside… The individual may think that the most important fact of reality is his own existence, but this is only his personal point of view, a relative frame of reference which is not shared by the rest of the living world. This self-importance also lacks historical perspective, for the brief existence of one person should be considered in terms of the world population, mankind, and the whole universe… (p. 236) To clarify these ideas, let us remember that liberal societies are based on the principle of individual self-determination, with the assumption that each human being is* ***born free*** *and has the* ***right*** *to develop his own mind, to construct his own ideology, to shape his own behavior, and to express his personality without external pressures or indoctrination… while remaining independent and self sufficient… This kind of liberal orientation has great appeal, but unfortunately its assumptions are not supported by neurophysiological and psychological studies of intracerebral mechanisms (p. 239)*»

J. Delgado (1969). Physical Control of the Mind: Toward a Psychocivilized Society.

ECN (2008) – Exoesqueletos – Drogas e neuroarmas – Neuroimagética – BMI – AI.

ECN (2008) – As dúvidas existenciais do ECN.

Será possível...

...ler e controlar estados cognitivos e intenções?

...ler, influenciar ou controlar as mentes de outros?

...disromper motivação adversária para lutar?

...aumentar capacidades cognitivas?

...remover o medo ou a dor?

…obter vantagens de degradar capacidades cognitivas dos adversários?

«*Can cognitive states and intentions of persons of interest be read? ...How can I know what someone knows? ...how one can know if someone is telling the truth… Can cognitive capacities be enhanced? Can cognitive states and intentions be controlled? … How can we disrupt the enemy's motivation to fight? Other questions raised by controlling the mind: How can we make people trust us more? What if we could help the brain to remove fear or pain? Is there a way to make the enemy obey our commands? Can cognitive states be used to drive devices?*»

«*…whether… people can read, influence, or control the minds of others in various cultural and national contexts*»

«*…seek advantage by degrading, temporarily or permanently, the cognitive abilities of others*»

National Research Council (2008). "Emerging Cognitive Neuroscience and Related Technologies" [Estudo encomendado pela Defense Intelligence Agency]

ECN (2008) – Dúvidas existenciais – Leitura mental.

Tem havido uso acrescido do termo "leitura mental"…

...na imprensa popular.

...mas também nalgumas áreas circunscritas do DoD.

«*There has been growing use of the term "mind reading" in the popular press and in a few circumscribed areas of the Department of Defense (DOD)… Mind reading typically*

refers to the capacity (imparted by an external mechanism—that is, some form of technology) to determine precisely what an individual is thinking or intending, whether or not the individual is willing to communicate that state of mind»

National Research Council (2008). "Emerging Cognitive Neuroscience and Related Technologies" [Estudo encomendado pela Defense Intelligence Agency]

ECN (2008) – Dúvidas existenciais – Sofística ética sobre valores societais.

Mundo moderno vê cérebro como órgão mais associado com identidade.

Teoria democrática [é só uma teoria] valoriza o indivíduo como tendo direitos.

«*...the modern world views the brain as the organ most closely associated with personal identity and modern democratic theory values the individual as a rights-bearer and moral agent, there is sure to be enormous societal interest in any prospective manipulation of neural processes*»

National Research Council (2008). "Emerging Cognitive Neuroscience and Related Technologies" [Estudo encomendado pela Defense Intelligence Agency]

ECN (2008) – Neuroimagética, para ler e agir sobre mentes.

Objectivo é "millisecond-level temporal resolution with precise spatial localization".

De resto, a tecnologia existente já permite...

"…real-time… data acquisition and analysis".

"…functional neuroimaging becoming cheaper, portable, more user friendly".

Áreas de aplicação.

Marketing, economics, HR, human performance, risk assessment, law, military.

Usar tecnologia neuroimagética para adquirir intelligence de…

"...captured combatants".

"... screening of terrorism suspects at checkpoints or ports of entry".

«*Progress continues to be made in both functional neuroimaging and neurophysiological methods toward the holy grail of neuroimaging, namely, millisecond-level temporal resolution with precise spatial localization. No current technology affords both high temporal resolution and high spatial resolution with access to the full brain…*»

«*...functional neuroimaging capability with real-time… data acquisition and analysis… is becoming cheaper, portable, and more user friendly. Continued refinement of these technologies is likely to lead to increased dissemination of this technology, with applications expanding well beyond the current primary fields of neuroscience research and clinical medicine. Areas where the application of advanced functional neuroimaging technology likely are business (marketing, economics, human resources), human performance, risk assessment, the field of law, and the military, all of them having great relevance to national policy and defense issues*»

Usar «*neuroimaging technology*» para «*acquisition of intelligence from captured unlawful combatants, enhanced training techniques, augmented cognition and memory enhancement of soldiers and intelligence operatives, the screening of terrorism suspects at checkpoints or ports of entry [airports]… and soldier-machine interface devices…*»

TMS, para mudar campos magnéticos no cérebro.

«*…the use of transcranial magnetic stimulation…TMS is a noninvasive way to excite neurons in the brain: rapidly changing magnetic fields (electromagnetic induction) are used to induce weak electric currents in neural tissue, allowing the brain to be activated from outside with minimal discomfort. Because TMS is noninvasive and able to improve performance on a variety of cognitive tasks, Sandberg and Bostrom suggest that it could be a very versatile tool for cognitive enhancement. One limitation is the short duration of its effect (minutes to an hour after stimulation), although some results suggest that coupling TMS with pharmacological manipulations of the dopaminergic system could facilitate long-term consolidation or longer effects TMS*»

National Research Council (2008). "Emerging Cognitive Neuroscience and Related Technologies" [Estudo encomendado pela Defense Intelligence Agency]

ECN (2008) – BMI e próteses cognitivo-sensoriais.

BMI, onde o cérebro comunica com a máquina directamente.

Próteses cognitivas e sensoriais, para alterar e agir sobre estas funções.

Estas coisas têm estado no foco da DARPA por anos (AugCog Program).

É dado o exemplo de próteses de memória e "conhecimento".

«*Brain-machine interfaces… direct brain-machine interfaces for control of hardware and software systems… Cognitive and sensory prostheses… to improve or extend human performance in the cognitive domain through sensory substitution and enhancement capabilities…*»

«*BCIs… this has been a focus of the Defense Advance Research Projects Agency's (DARPA's) Augmented Cognition program for several years. Brain prosthetics could*

become the new input-output devices for memory systems, allowing efficient searching and encyclopedic access to information»

Durante próximas duas décadas, vão ser de grande interesse…

"...gaming industry, rehabilitation, medical, and military sectors".

«*Over the next two decades… brain-computer interfaces (BCIs) are likely to be a great of interest to the gaming industry as well as to the rehabilitation, medical, and military sectors, and neuroimaging and neurophysiology will play a central role in those endeavors*»

National Research Council (2008). "Emerging Cognitive Neuroscience and Related Technologies" [Estudo encomendado pela Defense Intelligence Agency]

ECN (2008) – "The device can block out or alter reality".

Ter terceiras partes a controlar funcionamento mental não é aconselhável.

Por isso, em jeito de legalidade, o relatório avisa que...

…"the device can block out or alter reality". «*…wearable computing… the device can block out or alter reality*»

National Research Council (2008). "Emerging Cognitive Neuroscience and Related Technologies" [Estudo encomendado pela Defense Intelligence Agency]

ECN (2008) – Exoesqueletos.

"Exoskeletons have been developed to increase human strength, endurance, speed".

O exosqueleto lê o utilizador e comunica com ele.

«*Robotic prostheses and orthotics… robotic prostheses and mechanical enhancement devices… to improve or extend human performance in the physical domain… With respect to robotic orthotics, a variety of exoskeletons have been developed to increase human strength, endurance, and speed… The goal of research on orthotic exoskeletons is for the interface to be so transparent that there is no learning involved—the user simply performs the task in the usual way, and the system responds as if the wearer simply had stronger, faster, or more accurate limbs. This requires that the device do three things: (1) determine the user's intent, (2) apply forces when and where appropriate, and (3) get out of the way of the user's natural movement…*»

National Research Council (2008). "Emerging Cognitive Neuroscience and Related Technologies" [Estudo encomendado pela Defense Intelligence Agency]

ECN (2008) – Drogas – Efeitos psicológicos pretendidos.

Drogas podem ser usadas para melhorar, ou interferir com, sistemas específicos.

Ex. das anfetaminas… [drogas dadas a crianças, Ritalina e Aderall]

…podem aumentar atenção e concentração.

…aumentam riscos de adição e paranóia.

«*...drugs could target specific sensory receptors, perhaps to enhance, perhaps to interfere… For example, stimulants such as amphetamine can increase attention and concentration, but they also exert cardiovascular effects that can be exacerbated by physical exertion and heat, and with prolonged or high dose use, they carry risks of addiction and paranoia*»

Podem influenciar cognição, emoção, motivação, desempenho.

Drogas que favorecem aprendizagem, retenção selectiva, esquecimento selectivo, cognição social, merecem foco especial.

«*Drugs and other mind-altering chemicals can influence all aspects of human psychology, including cognition, emotion, motivation, and performance… drugs that appear (at least initially) to have effects concentrated in one area, such as speed of learning, accuracy of retention, selective retention or selective forgetting (as of traumatic memories), expanded attention span, and social cognition, might deserve particular attention…*»

National Research Council (2008). "Emerging Cognitive Neuroscience and Related Technologies" [Estudo encomendado pela Defense Intelligence Agency]

ECN (2008) – Drogas – Uso militar liberal de drogas – Escalamento.

O relatório antevê uso liberal de drogas sobre alvos militares e civis.

"...agentes químicos, dispersados sobre civis ou combatentes". «*...chemical agents… dispersed against civilians or… combatants*»

…através de gás, aerossóis, água potável, lançadas de alta altitude. Drogas lançadas sobre adversários «*in gas, in aerosols, in drinking water, or by high-altitude delivery…*»

"…pharmacological cluster bombs or land mines". «*...technologies that could be available in the next 20 years would allow dispersal of agents in delivery vehicles that would be analogous to a pharmacological cluster bomb or a land mine*»

…podendo causar incapacitação ou degradação de desempenho. «*Highly potent compounds could cause troop incapacitation or performance degradation*»

Acção-reacção-escalamento.

"Eu tenho drogas, o meu inimigo obtém antídotos, logo eu arranjo drogas mais potentes".

«*Development of antidotes or protective agents against various classes of drugs that could be used by an enemy force will also be important*»

National Research Council (2008). "Emerging Cognitive Neuroscience and Related Technologies" [Estudo encomendado pela Defense Intelligence Agency]

ECN (2008) – Drogas – Desafios militares em investigação neurofarmacológica.

Desafios de investigação incluem identificar…

…novos alvos para drogas e novos sistemas de entrega.

...novos métodos de alteração de funções celulares.

…estratégias para dirigir ou controlar efeitos somáticos e psicológicos.

...métodos sintéticos de produção de novas drogas.

«*Research challenges include the identification of new targets for drugs, new methods of altering cell function, new drug delivery systems, strategies to direct or control drug effects, and attempts to achieve targeted psychological effects*»

«*…it is likely that the paradigm of the pharmaceutical industry will change, from "discovering" drugs by screening many compounds to the purposeful engineering of desired molecules*»

De destaque para o DoD…

...usar nanotecnologia para entrega sangue-cérebro.

...novos fármacos dirigidos ao cérebro.

O que é pretendido são «*new pathways for drug delivery in addition to new drugs or new uses for existing drugs. Nanotechnologies will allow delivery of drugs across the blood-brain barrier in ways not now possible… nanotechnology and nanofabrication have significantly impacted the field of drug delivery… The continued development of these technologies will probably occur in conjunction with the development of pharmaceuticals targeted at the brain… The development of such neuropharmaceutical combinations is of great interest to the Department of Defense*»

Maior acesso farmacológico ao cérebro pode aumentar eficácia militar.

«*Increased access to the brain by drugs that cross the blood-brain barrier would allow increased potency [de efeito]… warfighters could be rapidly incapacitated. That could be done by covertly assaulting troops, and the result could range from severe incapacitation to death*»

National Research Council (2008). "Emerging Cognitive Neuroscience and Related Technologies" [Estudo encomendado pela Defense Intelligence Agency]

ECN (2008) – AI, para monitorizar e processar todo o espectro EM.

AI que usa Internet para se treinar a si mesma.

Sistema inteligente que monitoriza e processa toda a informação disponível.

Que raciocina como ser humano, aumenta continuamente as suas capacidades.

«*…an intelligent machine that uses the Internet to train itself… the Internet is by far the closest we have come to a total database of knowledge. One can imagine an intelligent system that continuously monitors and processes not only accumulated knowledge but also public and nonpublic information on current events… a system that reasoned like a human being… there would be no limit to augmenting its capabilities*»

«*A computational cognitive framework that, in combination with human capabilities, can monitor and perform complex reasoning on large amounts of knowledge from the Internet*»

National Research Council (2008). "Emerging Cognitive Neuroscience and Related Technologies" [Estudo encomendado pela Defense Intelligence Agency]

EM Neurotech – Neuroimagética [brain scanners].

Leitura mental – emoções, “deception detection”. Usar scans electromagnéticos para ver o que as pessoas estão a pensar (estados emocionais e outros) e se estão a mentir. Uso em interrogatórios, alfândegas, locais públicos, etc.

Artigos sobre neuroimagética. Non-invasive brain stimulation in the detection of deception; DHS - Deception Detection; The brain scan that can read people's intentions; Brain scan 'can read your mind'; Project Epoc, The games helmet that reads minds; Project Epoc thought-powered controller, could gaming get any lazier; EPOC - Next Generation Gaming; EPOC - Brain control headset for gamers; Brain control headset for gamers; Brain scanning may be used in security checks (EU); EU tests brain scanning to catch terrorists; Canadian company develops thought-control technology which uses brain waves; DARPA Wants to Install Transcranial Ultrasonic Mind Control Devices in Soldiers' Helmets; Farah, Neuroethics - The practical and the philosophical; How Technology May Soon Read Your Mind

FFW – Future Force Warrior, o andróide imperial do futuro.

FFW – Ciborgue semi-electrónico.

“Future Force Warrior”. O conceito do super-soldado, aumentado electrónica e farmacologicamente.

Ciborgue, tecnotronicamente aumentado.

Próteses robóticas.

Exoesqueletos. [Next-Gen Military Man - Wearable Machines]

BMI, interfaces neuronais. Interfaces cérebro-máquina, implantes electrónicos neuronais. [Super-soldiers may get brain-chip; Pentagon to Merge Next-Gen Binoculars With Soldiers' Brains; Uncle Sam Wants Your Brain - Wired]

Soldado é parte do campo de batalha virtual. Os soldados fundem-se com o campo de batalha tecnetrónico, através de implantes neuronais por meio dos quais estes possam estar em contacto permanente com satélites: recebendo informação detalhada do campo de batalha digital, mas também recolhendo e transmitindo informação para o sistema central. [Pentagon Preps Soldier Telepathy Push]

FFW – Andróide biológico ultra-medicado.

Drogas psicoactivas – “Neuroweapons”. Drogas alteradoras da consciência e do comportamento. [VER DARPA]

Suprimir consciência moral, reduzir peso emocional do combate. Reduzir a ansiedade. Criar apatia. Eliminar sentimentos de culpa e vergonha, reprimir inibições morais contra o acto de matar outro ser humano.

Memória – Beta-bloqueadores – Moreno. Beta-bloqueadores para apagar memórias traumáticas e stressantes, através da indução de amnésias parciais. Como o propranolol, um medicamento barato que pode ser usado para enfraquecer e “blur”[reprimir e desvanecer] memórias traumáticas, por ex., referentes a actos aberrantes cometidos pela pessoa.

(JM) beta-blockers (Os beta-bloqueadores têm o efeito de bloquear a consolidação de memórias com emoção. Ou seja, memórias vazias de emoções. Beta-bloqueadores para soldados, antes de entrar em combate. De modo que podem não ter sentido de vergonha, ou culpa, e consciência diminuída)

Aumentar agressividade, suprimir medo e dor.

Aumentar força e resistência.

Aumentar concentração – Anular a fadiga. Aumentar capacidades de concentração (como ritalina, prescrita para desordens de atenção). Ficar acordado e alerta durante dias seguidos (como é o caso do uso de modafinil, normalmente prescrita para narcolepsia, para combater a fadiga).

ADVERSÁRIOS. Gerar apatia, medo, confusão.

ARTIGOS. [Brain will be battlefield of future, warns US intelligence report; A neuroscience arms race could lead to guilt-free soldiers; Military Report Touts Brain Altering Drugs, Mind Control To Make Soldiers Want To Fight; Researchers say drugs could sap an enemy's will to fight]

ANDREW MARSHALL – "The Marshall Plan".

Há transformar a força – alterar o funcionamento mental dos soldados.

Em parte usando drogas.

"A future intelligence problem will be to know what drugs the other guys are on".

«*We've got to transform the force… as a way of exploring what new technologies can really do for you… new classes of drugs will be available relatively shortly… These drugs are just like natural chemicals inside people, only with behavior-modifying and performance-enhancing characteristics. One of the people I talk to jokes that a future intelligence problem is going to be knowing what drugs the other guys are on*» Andrew Marshall, Pentagon futurist, director of the DoD Office of Net Assessment, "The Marshall Plan", WIRED Magazine, February 2003

FLETCHER – Quimeras e parahumanos.

Joseph Fletcher – Harvard – "O patriarca da bioética".

"Quimeras ou parahumanos podem fazer trabalhos perigosos ou degradantes".

"Actualmente, esses trabalhos são feitos por imbecis".

«*Chimeras or parahumans might legitimately be fashioned to do dangerous or demeaning jobs. As it is now, low-grade work is shoved off on moronic… individuals, the victims of uncontrolled reproduction. Should we not "program" such workers thoughtfully instead of accidentally, by means of hybridisation?*»

Joseph F. Fletcher (1988). "The ethics of genetic control: ending reproductive roulette". Prometheus Books.

<u>GEORGE ANNAS – "Modern genetics is eugenics"</u>.

«*Modern genetics is eugenics*» George Annas, M.D., [bioethics professor at Boston University, speaking at the U.S. Holocaust Museum in Washington], cit. in John Cavanaugh O'Keefe (2000). "The Roots of Racism and Abortion: An Exploration of Eugenics".

GUSTERSON – A corrida às neuroarmas.

Hugh Gusterson faz uma apta análise da situação.

"Receio" de "neuroweapons gap" justifica corrida às armas.

Será alegado que países democráticos podem ter estas armas, mas os outros não.

Que uso dual destas tecnologias salvará vidas, dando um bom mecanismo de racionalização a muitos cientistas militarizados.

Mercado para bolsas será dominado por contratadores militares.

Quando os dominós tiverem caído, haverá um mundo ameaçado por "chemicalized soldiers and roboterrorists straight out of Blade Runner".

«*If left on autopilot, however, it's not hard to see where all of this will lead… we can anticipate future fears of a "neuroweapons" gap, and these fears will justify a headlong rush into research (quite likely to involve unethical human experiments) that will only stimulate our enemies to follow suit. The military and scientific leaders chartering neuroweapons research will argue that the United States is a uniquely noble country that can be trusted with such technologies, while other countries (except for a few allies) cannot. They will also argue that these technologies will save lives and that U.S. ingenuity will enable the United States to dominate other countries in a neuroweapons race. When it is too late to turn back the clock, they will profess amazement that other countries caught up so quickly and that an initiative intended to ensure American dominance instead led to a world where everyone is threatened by chemicalized soldiers and roboterrorists straight out of Blade Runner… Research funding will be sufficiently dominated by military grant makers that it will cause some scientists to choose between accepting military funding or giving up their chosen field of research. And the very real dual-use potential of these new technologies (the same brain implant can create a robosoldier or rehabilitate a Parkinson's disease sufferer) will allow scientists to tell themselves that they are "really" working on health technologies to improve the human lot, and the funding just happens to come from the Pentagon*»

Hugh Gusterson, "*The militarization of neuroscience*". Bulletin of the Atomic Scientists, April 9, 2007.

RFID – Implantes de microchips.

Artigos. Newsclip - US group implants electronic tags in workers; Newsclip - Microchips implanted in Mexican officials; RFID Implants for Humans Hyped On Yahoo Tech; Humans 'will be implanted with microchips'; Toronto Star - Chipping humans, ‘One generation is all they need’

JAMES WATSON – Stupidity is a disease – Make all girls pretty.

Artigo. Stupidity should be cured, says DNA discoverer

"Estupidez é uma doença – má escolaridade não se deve a pobreza, mas sim a genes".

"Tornar todas as raparigas bonitas seria óptimo". «*If you are really stupid, I would call that a disease… The lower 10 per cent who really have difficulty, even in elementary school, what's the cause of it? A lot of people would like to say, 'Well, poverty, things like that.' It probably isn't. So I'd like to get rid of that, to help the lower 10 per cent… People say it would be terrible if we made all girls pretty. I think it would be great*» Dr. James Watson, President of the Cold Spring Harbor Laboratory, Long Island. Nobel Prize Laureate, for the co-discovery of DNA.

JULIAN HUXLEY – Inagura TH – "Dar poderes divinos ao ser humano".

Huxley inagura a doutrina do TH.

"Humanidade terá um 'cosmic office'". Huxley escreve que «...*the human species has to do to prepare itself for the cosmic office to which it finds itself appointed...*»; algo como o Homem se tornar Deus. Para isso, a Humanidade superar-se-ia a si própria, tornando-se semidivina, e a esta doutrina Julian Huxley chamou de «*Transhumanism*».

Julian Huxley, "New Bottles for New Wine" (1957). London: Chatto & Windus.

KAUTSKY – Fusão – Inorgânico, biológico, humano.

Natureza, a três níveis: inorgânica, biológica, humana-social.

Todos os níveis têm sistemas peculiares de funcionamento.

Mas todos têm pontos em comum, que se podem encontrar.

A consequência lógica deste sistema teórico-prático seria/é a morte da vida.

«*I apply the method of natural science to the study of society, which I regard not as something outside nature, but as a part of nature. It has, to be sure, its own specific laws, just as organic nature is subject to specific laws that are not valid for inorganic phenomena, and in inorganic nature, in turn, specific laws are effective for each of the different aggregate states. These differences are not incompatible with the unity of nature*» Karl Kautsky (1929). "Nature and Society – *Natur und Gesellschaft*", Die Gesellschaft*,* (Berlin), VI/2 No.12 (December 1929), pp.481-505.

LEE SILVER – GenRich e Naturals.

Duas castas genéticas e, eventualmente, espécies diferentes. Silver acredita que a humanidade se vai bifurcar em duas castas genéticas, de ubermenschen e untermenschen e, após isso, em duas espécies diferentes.

Previsão de Silver para o ano 2350.

"GenRich (10% da população), com genes sintéticos, são aristocratas genéticos".

"Controlam economia, media, entretenimento, conhecimento".

"Os Naturals trabalham em serviços de baixa categoria".

"GenRich e Naturals dissociam-se e deixam de se misturar reprodutivamente".

«*The GenRich—who account for 10 percent of the American population—all carry synthetic genes. Genes that were created in the laboratory….The GenRich are a modern-day hereditary class of genetic aristocrats….All aspects of the economy, the media, the entertainment industry, and the knowledge industry are controlled by members of the GenRich class*»

Quando aos outros 90%: «*Naturals work as low-paid service providers or as laborers*»

«*[A]s time passes,...the GenRich class and the Natural class will become the GenRich humans and the Natural humans—entirely separate species with no ability to cross-breed, and with as much romantic interest in each other as a current human would have for a chimpanzee*» – Lee M. Silver (1997). "Remaking Eden: Cloning and Beyond in a Brave New World". HarperCollins

Matrix System.

Grelha tecnotrónica global, super-IA. Uma grelha de controlo electrónica sobre todo o planeta, através de sensores electrónicos geridos por super-computadores.

Manipulação genética, psicotrónica e farmacológica. The Technocracy and the Genetic Engineering of Humanity

Sensores, ambientes inteligentes. Sensors of the Future Will Create The Matrix; 2020 - dawn of the 'intelligent' classroom; Rear Admiral - Kids set for 'Matrix' future

Smart dust. 'Smart dust' aims to monitor everything

Internet-of-things. EU Set to Move 'Internet of Things' Closer to Reality

Bio-monitorização. Bio monitoring - You might wear computing's next wave; Bio monitoring - Microsoft bio monitoring

"The future has a kill switch". I've Seen the Future, and It Has a Kill Switch (noção de que tudo será electronicamente controlado)

MEYERSON – Destruir a mente para curar a mente.

Abraham Meyerson – Eugenista – ECT. Este estado de espírito – destruir a mente para curar a mente – foi melhor definido por um dos mais eminentes psiquiatras da época, Abraham Meyerson. Eugenista fanático, foi essencial na popularização do ECT.

"Estas pessoas têm mais inteligência do que conseguem lidar".

"Redução de inteligência essencial para processo curativo".

"Algumas das melhores curas, são naqueles indivíduos reduzidos a amência".

«*I believe there have to be organic changes or organic disturbances in the physiology of the brain for the cure to take place. These people have for the time being at any rate more intelligence than they can handle ... the reduction of intelligence is an important factor in the curative process. The fact is that some of the very best cures that one gets are in those individuals whom one reduces almost to amentia [feeble-mindedness]...*» (1942, cited in Breggin, 1979: 142-143)

NSF-DOC – Convergência NBIC – Communicator – BMI – Hive Mind.

NSF-DOC – Convergência NBIC para revolucionar sociedade.

O potencial da convergência NBIC para influenciar e definir futuro é ilimitado.

«*…the potential of the new convergent NBIC technologies for influencing and defining the future is unlimited and likely unimaginable*»

Mind Over Matter in an Era of Convergent Technologies. *Daniel L. Akins, City University of New York*

Convergência NBIC tem potencial para revolucionar sociedade.

«*Changes that bring together nanotechnology, information science, biology, and cognition have the potential to revolutionize the way we work and organize society*»

Enhanced Knowledge-Based Human Organization and Social Change. *Kathleen M. Carley, Carnegie Mellon University*

NSF-DOC – Matrizes informacionais – sensores, integração de dados.

Convergência NBIC possibilita recolher, manter e analisar grandes volumes de dados. «*Combined nano-, bio-, info-, and cogno-technologies make it possible to collect, maintain, and analyze larger quantities of data*»

Bio-vigilância: "smart sensors" na água, ar, solo e nos humanos.

Dados são integrados com informação geográfica, demográfica e social.

«*... "biosurveillance"... smart sensors at the biological level in the air, water, and ground, and on humans. Early detection requires integrating this data with geographic, demographic, and social information*»

Nano-bio-sensores embebidos no corpo – dados de saúde, localização, stress.

Superfícies inteligentes que detectam quem está presente.

Data mining e integração, para combinar dados e computar previsões de cenários.

«*...nano-bio-sensors that are embedded in the body and that report on individual health, stress level, and location; intelligent surfaces that track who is present while reshaping themselves to meet the needs of and enhance the comfort of the users… air and water sensors that sense contaminants; data-mining tools that locate information, simulation tools that estimate the change in social outcomes; information assurance*

tools and secure distributed databases… distributed database tools, data integration procedures, information assurance technology, and smart sensors»

Enhanced Knowledge-Based Human Organization and Social Change. *Kathleen M. Carley, Carnegie Mellon University*

NSF-DOC – Convergência NBIC é totalitária.

Necessidade de mudar culturas, legislações, e maneiras de trabalhar.

"Privacy laws, for example".

"Views of knowledge as power will limit and impede data collection".

"Having such data will enable big-brotherism".

«*Those problems dealing with the need to change cultures, legislation, and ways of working will be more difficult. Privacy laws, for example, could mitigate the effectiveness of these tools or even determine whether they are ever developed… Views of knowledge as power will limit and impede data collection. Having such data will revolutionize healthcare, human resources, career services, intelligence services, and law enforcement. Having such data will enable "big-brotherism."*»

Enhanced Knowledge-Based Human Organization and Social Change. *Kathleen M. Carley, Carnegie Mellon University*

NSF-DOC – "The Communicator".

"Vista, audição, brain-to-brain, brain-machine-brain".

Para ultrapassar...

Desigualdades... [todos estão igualmente fundidos numa rede]

Isolação do indivíduo do seu ambiente... [indivíduo é forçado a interagir]

Conflito desnecessário. [todos são igualmente controlados e cerebralmente lavados]

«*The Communicator will also be a facilitator for group communication, an educator or trainer, and/or a translator… It will operate in multiple modalities, such as sight and sound, statistics and text, real and virtual circumstances, which can be selected and combined as needed in different ways by different participants. Improving group interactions via brain-to-brain and brain-machine-brain interactions will also be explored… In total, a Communicator system with these attributes will be able to help overcome inequality between people, isolation of the individual from the environment,*

injustice and deprivation, personal and cultural biases, misunderstanding, and unnecessary conflict»

Enhancing Group and Societal Outcomes Theme Summary. *Panel: J.S. Albus, W.S. Bainbridge, J. Banfield, M. Dastoor, C.A. Murray, K. Carley, M. Hirshbein, T. Masciangioli, T. Miller, R. Norwood, R. Price, P. Rubin, J. Sargent, G. Strong, W.A. Wallace*

NSF-DOC – "The Communicator" (2).

Cada "communicator" armazena e transmite perfil electrónico do utilizador.

Sensores pervasivos, realidade aumentada.

"…details about preferences, interests, and background… detection and broadcast of the physiological and affective states of group participants".

"…information they can easily broadcast in group situations".

"…cognitive factors via pattern recognition (such as face recognition and voice pitch analysis…".

"…bioauthentication… to identify each individual in a group".

"…augmented reality… pervasive sensors… data management and transmission".

"…a new form of social cooperation" baseada em "common values and ideas".

«*The Communicator system… will allow individuals to carry with them electronically stored information about themselves that they can easily broadcast as needed in group situations. Such information might include details about preferences, interests, and background… detection and broadcast of the physiological and affective states of group participants… by monitoring biological information (such as galvanic skin response and heart rate) and cognitive factors via pattern recognition (such as face recognition to detect facial emotion, and voice pitch analysis to detect stress levels)… Using bioauthentication, the system could identify each individual in a group, including specific kinds of information about each individual… Another key element of The Communicator system will be avatars that can take on human appearance and behavior in a 3-D environment. They should be human-sized with full human fidelity, especially with respect to facial characteristics and emotion… The avatars should be life-like, so people will respond to them as though they are real. Avatars should be "in-a-box" and able to be placed and projected wherever needed, whether on a screen, as a hologram in the middle of a room, or through virtual reality viewers. The human-computer interface should be a wearable system offering augmented reality in office, schoolroom, factory, or field situations*»

«*The Communicator system will incorporate each of the four NBIC technologies… Nanotechnology will be required to produce high-speed computational capabilities,*

wearable components that consume little energy, and pervasive sensors… Biotechnology will be fundamental to the interfaces, to monitoring the physical status of participants, and to the general design of human-friendly technologies… Information technology will be responsible for data management and transmission, translation across modalities and languages, and development of avatars and intelligent agents… Cognitive science will provide the understanding of effective learning styles, methods for elimination of biases, and the directions in which to search for common values and ideas that will be the foundation of a new form of social cooperation»

The Communicator: Enhancement of Group Communication, Efficiency, and Creativity. *Philip Rubin, Murray Hirschbein, Tina Masciangioli, Tom Miller, Cherry Murray, R.L. Norwood, and John Sargent*

NSF-DOC – Interface cérebro-máquina.

Engenharia cognitiva para melhorar desempenho humano.

Isto envolve integrar tecnologia no sistema nervoso…

…e integrar aspectos da cognição humana em máquinas (AI).

«*…integration of technology into the human central nervous system… integration of important features of human cognition into machines… integration of technologies (cognitive prosthetics) into the task environment to enhance human performance*»

Engineering the Science of Cognition to Enhance Human Performance. *William A. Wallace, Rensselaer Polytechnic Institute*

NSF-DOC – Interface cérebro-máquina – DARPA e aplicações (2).

A base é um programa da DARPA.

Aplicações.

"…take brain signals… and then to impart feedback signals back into the brain"

"…learning and training, [machine/equipment] control, decision-making, remote sensing of stress, entertainment…"

"…people may be "immersed," MATRIX-style, into the midst of a movie".

«*…The intent is to take brain signals and use them in a control strategy and then to impart feedback signals back into the brain. The DARPA program could be extended to include a broader range of potential impact by including the possibility of other applications: learning and training, automobile control, air traffic control, decision-making, remote sensing of stress, and entertainment… Direct connection into the brain*

could yield a revolution in entertainment, as people may be "immersed," MATRIX-style, into the midst of a movie or educational show»

Brain-Machine Interface. *Robert Asher, Sandia National Laboratories*

NSF-DOC – Fusão de cognição com comunicação, através de interfaces neurais.

A visão unificadora é a fusão da cognição e da comunicação.

Através de "neural interfaces". «*...neural interfaces*»

Um mundo no qual estamos continuamente a…

"…broadcasting, receiving, storing, synthesizing, and manipulating information".

"…We will be embedded in dynamic, continually changing communicative clouds of data signals".

"…information about place, location, language, identity, persona, meaning, intent".

Este é um "new communicative, social world".

«*The unifying vision... is the merging of cognition and communication… Imagine a future without cellphones, laptops, PDAs, and other cumbersome devices... we will soon be moving through a world in which we are continuously broadcasting, receiving, storing, synthesizing, and manipulating information. We will be embedded in dynamic, continually changing communicative clouds of data signals that communicate information about place, location, language, identity, persona, meaning, and intent*»

«*…this new communicative, social world*»

«*The "intelligent" systems of the future that will be fundamental to group and social communication... will rely on the gains made in the fundamental understanding of the psychology, biology, and neuroscience of human behavior and performance, including cognition, perception, action, emotion, motivation, multimodality, spatial and social cognition, adaptation, linguistic analysis, and semantics. These gains will be enhanced by consideration of human behavior as a complex adaptive biological system tightly coupled to its physical and social environment*»

Cognition, Social Interaction, Communication, and Convergent Technologies. *Philip Rubin, National Science Foundation*

NSF-DOC – NBIC, educação e formação contínua.

Convergência NBIC determinará educação e formação contínua.

Comunicação cérebro-sensores-sistemas wireless.

«*...converging technologies (CT), the synergistic interplay of nano-, bio-, information, and cognitive technologies (NBIC) will enable significant improvements in how, where, and what is taught in grades K-12 and will also support the lifelong learning required by a rapidly developing technological economy*»

«*New tools for learning such as neuroscience sensors, increased quality of Internet service via guaranteed bandwidth, and a new understanding of biological feedback for self-improvement will provide new, highly efficient learning methods for all... NBIC has allowed these teachers to productively access and continually learn new information through advances in small biological and neurological sensors and the biofeedback they produce. A number of special needs students are working in rooms, receiving cues from a wireless network that are appropriate for their individual cognitive and physical needs as developed through NBIC*»

«*...many students take advantage of 24/7 availability of coursework at their homes, work areas, and at the school... all citizens visit the school building throughout the day to better their lives... Delivery of learning experiences will be designed to enhance student attention and mental engagement. This goal will be supported in the classroom and at home by digital game-based learning (DGBL) experiences that provide (1) meaningful game context, (2) effective interactive learning processes including feedback from failure, and (3) the seamless integration of context and learning (Prensky 2001). Entertaining interactive lessons are available (Lightspan AdventuresTM) that run on a PC or a PlayStation® game console so that they can be used both in school and after school and in students' homes...*»

Converging Technologies: A K-12 Education Vision. *James G. Batterson and Alan T. Pope, NASA Langley Research Center*

NSF-DOC – Órgãos sensoriais artificiais.

"Artificial sensory organs".

"Even better, replace the eyeball…people are happy to get a new component".

«*Better Senses... Non-invasive, removable sensory enhancements (eyeglasses and contact lenses) are used now, and are a useful first step. But why not go the second step and surgically correct the eyeball? Even better, replace the eyeball. As with artificial hips and artificial hearts, people are happy to get a new, better component; artificial sensory organs will follow... Electronic technology can be expected to provide artificial sensory organs that are small, lightweight, and self-powered. An understanding of the sensory systems and neural channels will enable, for example, hooking up the new high-resolution electronic eyeball to the optic nerve... we will have a means of performing the necessary microsurgery to link electronic signals to nerves*»

The Consequences of Fully Understanding the Brain. *Warren Robinett*

NSF-DOC – Memória electrónica, imaginação artificial.

“Technologically-enhanced memory”.

“…so that every hour of everything you have ever seen (or heard) is recorded”.

Imaginação artificial.

“augmented human imagination”.

Vida mental da pessoa passa a resumir-se a dados que lhe são “downloaded”.

Já não vai ser a imaginação do indivíduo, vai ser um conjunto de dados recebidos a partir de fora para criar simulações virtuais de acontecimentos.

«*Better Memory… Another way of thinking about technologically-enhanced memory is to imagine that for your entire life you have worn a pair of eyeglasses with built-in, lightweight, high-resolution video cameras which have continuously transmitted to a tape library somewhere, so that every hour of everything you have ever seen (or heard) is recorded on one of the tapes. The one-hour tapes (10,000 or so for every year of your life) are arranged chronologically on shelves. So your fuzzy, vague memory of past events is enhanced with the ability to replay the tape for any hour and date you choose. Your native memory is augmented by the ability to reexperience a recorded past*»

«*Better imagination… we may find personal simulation capability [augmented human imagination] built-in, along with memory enhancement, and improved sensory organs*»

The Consequences of Fully Understanding the Brain. *Warren Robinett*

NSF-DOC – Mente é “downloaded”, trazendo “imortalidade”.

“Imagine the person‘s knowledge, personality, could be extracted from his brain”.

“*…his mind could be “run” on different hardware*”.

“*No death. You back yourself up. You get new hardware as needed*”.

«*Imagine further that, for an individual, the data describing that person‘s knowledge, personality, and so forth, could be extracted from his brain. In that case, his mind could be “run” on different hardware… Having made the leap to new hardware for yourself, many staggering options open up… No death. You back yourself up. You get new hardware as needed…*»

The Consequences of Fully Understanding the Brain. *Warren Robinett*

NSF-DOC – Aprendizagem instantânea – Speedlearn. «*Instant Learning… get the knowledge file and run the integrate procedure. Get a PhD in Mathematics with "one click"*»

The Consequences of Fully Understanding the Brain. *Warren Robinett*

NSF-DOC – Hive Mind.

"Individuals served to keep the gene pool stirred up via sexual reproduction".

Mas agora existe a possibilidade de reprodução artificial, com bebés desenhados.

Portanto, "the function and purpose served by individuals becomes unclear".

E é mesmo assim. O indivíduo está obsoleto, por decreto ideológico.

"…a hive mind — an enormous, single, intelligent entity".

"What does a human become when freed from pain, hunger, lust, and pride?"

«*Hive Mind… If we can easily exchange large chunks of knowledge and are connected by high-bandwidth communication paths, the function and purpose served by individuals becomes unclear. Individuals have served to keep the gene pool stirred up and healthy via sexual reproduction, but this datahandling process would no longer necessarily be linked to individuals. With knowledge no longer encapsulated in individuals, the distinction between individuals and the entirety of humanity would blur. Think Vulcan mind-meld. We would perhaps become more of a hive mind — an enormous, single, intelligent entity*»

Isto pode permitir «*Self-Directed Evolution*»… «*What will human-like intelligence evolve into if it is freed from the limits of the human meat-machine… What does a human become when freed from pain, hunger, lust, and pride? (If we knew the answer to this, we might be able to guess why we haven't detected any sign of other intelligences in the 100 billion stars of our galaxy!)*»

The Consequences of Fully Understanding the Brain. *Warren Robinett*

NSF-DOC – Engenharia memética – Socio-tech – Matrizes antecipatórias.

NSF-DOC – Engenharia memética.

Na "sociedade de informação", o recurso mais valioso não é ferro ou petróleo...

...mas sim cultura...

… valores, normas, crenças, padrões de comportamento.

[Sem dúvida, numa sociedade pós-industrial o que interessa já não são valores de produção, mas sim aquilo que permite manter controlo sobre população]

«*In the "information society" of the twenty-first century, the most valuable resource will not be iron or oil but culture… the fundamental values, norms, and beliefs that define a society's way of life… The habitual patterns of behavior in families, neighborhoods, corporations, and government agencies*»

O meme, versão cultural do gene.

Tal como a genética explora os códigos de genes, para formar indivíduos...

...a memética estuda os códigos de memes, para formar sistemas de crenças e visões do mundo.

«*The fundamental concept is the **meme**, analogous to the gene in biological genetics, an element of culture that can be the basis of cultural variation, selection, and evolution… memes are passed from one individual to another through learning…*»

Engenharia memética.

"…a memética abrange biologia, ciência cognitiva e informacional, estudos culturais".

"For any given cultural trait, there may exist a number of distinct alternatives".

"…memetic engineering will identify these alleles, and combine these cultural traits in new ways".

A ideia é conhecer aquilo que toca e influencia o indivíduo, de modo a poder rodeá-lo de memes específicos.

E, com a sociedade de informação, isso pode ser feito numa base literalmente individualizada.

«*…memetics spans biology, information science, cognitive science, and cultural studies*»

«*Memetic Engineering… Comparable work will be required in cultural memetics. For any given cultural trait, there may exist a number of distinct alternatives, like alleles in biological genetics, the mutational forms of a gene. The characteristics of varied individuals are the complex result of different alleles interacting across numerous genes. Categorization of culture from a memetic perspective will identify these alleles, and memetic engineering could make extensive use of techniques for combining these cultural traits in new ways*»

Engenharia memética aplicada ao crime de pensamento.

Problema clássico da ciência social tem sido o de compreender a dissidência social.

I.e., "cultural pathology".

Compreensão da memética que gera grupos de oposição pode ajudar governos a combater estes grupos.

É dado o exemplo da globalização.

Certas ideias têm a força de um vírus social.

É importante compreender essas ideias e tentar arranjar formas de fazer hacking.

Memética pode trazer cooperação e uma "sociedade culturalmente saudável".

«*Cultural Pathology… the classic problem of social science has been to understand how and why some people and groups deviate from the standards of society, sometimes even resorting to crime and terrorism. Recent attention on closed groups has once again raised the question, "Why do people believe weird things?" — to borrow from a recent book title (Schermer 2002). The problem of social order thus depends upon the dynamic interactions between cultures, subcultures, and countercultures*»

«*…deep scientific understanding of the memetic processes that generate radical opposition movements may help government policymakers combat them effectively. It may never be possible to eradicate them entirely, but with new scientific methods, we should be able to prevent them from driving our civilization to extinction*»

«*A science of memetics, created through the convergence of many existing disciplines, would likely give a basis for understanding the relationship between social groups and globalization — a topic of enormous recent interest*»

«*Certain "ideas" may have the force of a social virus that spreads as quickly and can have as deleterious effects on a population as do biological viruses… It is important to examine such theories and to consider whether or not people are naturally vulnerable to "hacking" in the concept domain, as their computer networks are vulnerable in cyberspace. At the same time, memetics can help us understand the forces that promote cooperation between people and sustain culturally healthy societies*»

Memetics: A Potential New Science. *Gary W. Strong and William Sims Bainbridge, National Science Foundation*

NSF-DOC – Socio-tech e matrizes antecipatórias de informação.

Socio-tech, a ciência preditiva do comportamento das sociedades.

Objectivo é adquirir capacidade de prever comportamento individual e grupal.

Ciências biológicas, comportamentais, cognitivas, sociais.

«*Socio-tech is the predictive — not descriptive — science of the behavior of societies. It is the convergence of information from the life sciences, the behavioral sciences (including psychology and the study of cognition), and the social sciences… The ultimate goal is acquiring the ability to predict the behavior of an individual and, by extension, of groups*»

"Socio-Tech…The Predictive Science of Societal Behavior". *Gerold Yonas, Sandia National Laboratories,**1** and Jessica Glicken Turnley, Galisteo Consulting Group, Inc.*

"EUA vai estar sujeito a ameaças militares assimétricas".

"Têm de desenvolver sistema de antecipação de ameaças".

"…use the power of information technology to assemble, filter, and analyze data about the adversary".

"…acquire a large volume of data regarding each potential enemy organization".

"Data linkage among many databases… open source material… intelligence sources".

"…group's characteristics, people, funds, movements, motivations… sociological analysis, psychological profiling… how the adversary analyzes and makes decisions".

«*The United States will be subject to asymmetric military threats… the United States must develop an intelligence system to anticipate threats from adversary states or substate actors… The suggested approach is to use the power of **information technology** to assemble, filter, and analyze data about the adversary. First, it will be necessary to acquire a large volume of data regarding each potential enemy organization. Data linkage among many databases would be needed, including some from open source material and others from intelligence sources. The data would include the group's characteristics, its people, funds, and the movement of each, the motivations of the people, relevant current events, significant dates, and some way of encoding the cultural perspectives of the organization… sociological analysis (for the group) and psychological profiling would be required… Understanding how the adversary analyzes and makes decisions involves modeling his **cognition** processes*»

Data Linkage and Threat Anticipation Tools. *Tony Fainberg, Defense Threat Reduction Agency*

NSF-DOC – Convergência NBIC revoluciona trabalho e organizações.

«*In the area of organizations, a key issue is team design and redesign (Samuelson 2000). Team design and redesign requires accurate data of who knows what, can work with whom, and is currently doing what. Doing such a skill audit, network analysis, and task audit is a daunting task. Maintaining the information is even more daunting. Individuals are loathe to provide the information for fear of losing their basis of power or anonymity, or for fear of reprisal. However, much of the information is implicit in the locations that people occupy, their stress levels, webpages, curricula vitae, public conversations, and so on*»

«*Since many organizations are coordinated and managed through the coordination and management of information, as knowledge is no longer controlled, new organizational forms should emerge. For example, a possible result might be the development of monolith corporations with cells of individuals who can do tasks, and as those tasks move from corporation to corporation, the cells would move as well. In this case, benefits, pay scales, etc., would be set outside the bounds of a traditional corporation. In this case, individual loyalty would be to the area of expertise, the profession, and not the company. Corporations would become clearinghouses linking agents to problems as new clients come with new problems*»

«*To address issues such as these, researchers are beginning to use multiagent network models. These models draw on research on social and organizational networks (Nohira and Eccles 1992), advances in network methodology (Wasserman and Faust 1994), and complex system models such as multiagent systems (Lomi and Larsen 2001). In these models, the agents are constrained and enabled by their position in the social, organizational, and knowledge networks.*

These networks influence who interacts with whom. As the agents interact, they learn, which in turn changes with whom they interact. The underlying networks are thus dynamic. The results suggest that organizations of the future might be flatter, with individuals coming and going from teams based on skills, that is, what they know, and not whom they know. As a result, social life will become more divorced from organizational life. Initial simulation results suggest that if information moves fast enough, decisions will become based not as much on information as on the beliefs of others; this should be particularly true of strategic decisions.

Social Engineering… Combined nano-, bio-, info-, and cogno-technologies make it possible to collect, maintain, and analyze larger quantities of data. This will make it possible to socially engineer teams and groups to meet the demands of new tasks, missions, etc. The issue is not that we will be able to pick the right combination of

people to do a task; rather, it is that we will be able to pick the right combination of humans, webbots, robots, and other intelligent agents, the right coordination scheme and authority scheme, the right task assignment, and so on, to do the task while meeting particular goals such as communication silence or helping personnel stay active and engaged. Social engineering is, of course, broader than just teams and organizations»

Enhanced Knowledge-Based Human Organization and Social Change. *Kathleen M. Carley, Carnegie Mellon University*

PETER BREGGIN – Psicotrópicos e dogma psiquiátrico.

PETER BREGGIN – Destruir vidas com drogas e mentalidade psiquiátrica.

Para destruir a vida de uma pessoa...

...persuadi-la que as relações não significam nada, que escolha é impossível...

...que a mecânica biológica funciona sobre toda a conduta.

...prescrever-lhe psicotrópicos que destroem capacidades psicológicas e espirituais.

«*Nothing has harmed the quality of individual life in modern society more than the misbegotten belief that human suffering is driven by biological and genetic causes and can be rectified by taking drugs or undergoing electroshock therapy. ... If I wanted to ruin someone's life, I would convince the person that that biological psychiatry is right - that relationships mean nothing, that choice is impossible, and that the mechanics of a broken brain reign over our emotions and conduct. If I wanted to impair an individual's capacity to create empathetic, loving relationships, I would prescribe psychiatric drugs, all of which blunt our highest psychological and spiritual functions*»

Peter R. Breggin, M.D., in the foreword to William Glasser (2000). "Reality therapy in action". Harper Collins Publishers, p. xi.

PETER BREGGIN – Drogas destroem cérebro e funções mentais.

Drogas para "ultrapassar o dia", "lidar com stress", "relacionar-se melhor".

Não existem drogas que melhorem funções mentais ou relações humanas.

Os processos mentais só são prejudicados.

«*Advocates of psychiatric drugs often claim that the medications improve learning and the ability to benefit from psychotherapy, but the contrary is true. There are no drugs that improve mental function, self-understanding, or human relations. Any drug that affects mental processes does so by impairing them." Once again, this principle may be best understood in relation to people who use so-called recreational drugs. Many individuals drink alcohol, smoke marijuana, or take other nonprescription drugs to "get through the day," to "handle work stress", or to "relate better"*»

Peter R. Breggin & David Cohen (1999). Your drug may be your problem: how and why to stop taking psychiatric drugs. Perseus.

Posthuman Manifesto: Irracionalismo e sentimentos anti-humanos

"The Posthuman Manifesto", Professor Robert Pepperell, Universidade de Cardiff.

"Humanos já não são tão importantes como antes".

"É agora claro que Humanos já não são a coisa mais importante no Universo". «*It is now clear that Humans are no longer the most important things in the Universe. This is something the Humanists have yet to accept*»

Só se diz uma coisa destas quando se quer fazer mal a humanos. E os Humanistas actuais, a cooptação existencialista de Humanismo (o seu oposto, na verdade), odeiam humanos e vida humana.

A estátua de cabeça de ouro, pés de barro – fundação em paralogismos dialécticos.

"A lógica é uma ilusão; verdade e falsidade também" [oxímoro]. Esta é uma afirmação auto-contraditória e impossível. Não se pode fazer uma afirmação lógica de que a lógica é impossível; não se pode dizer que a única verdade é que não existe verdade. «*Logic is an illusion of Human imagination. Truth and Falsity do not exist in Nature - other that in Human thought*»

"Objectividade descritiva da complexidade de um sistema é também impossível". «*The level of complexity in a system cannot be defined in objective (that is absolute) terms. Complexity is a function of Human cognition, not an intrinsic property of anything we might look at*»

Autor passa o texto a fazer afirmações "lógicas", de verdade, objectivas – mas irracionalistas. É claro que todos estes paralagismos funcionam apenas como forma de obter "licença" para chegar a conclusões que se *sabe* que são desonestas. Portanto, o autor vai passar o seu tempo inteiro a fazer afirmações "lógicas" de verdade e de objectividade, mas já pediu licença para ser incoerente e epistemologicamente nihilista, algo que vai ser.

Estas estátuas ***colapsam***. Seja como for, o problema com as estátuas de cabeça de ouro e pés de barro é que colapsam e não é uma queda bonita de se ver.

A estátua de cabeça de ouro, pés de barro – Ciência rejeitada em prol de charlatanismo.

“Nenhum modelo científico pode ser completo, apenas parcial e contingente”.

“Cientista escolhe viés particular a introduzir” (que variáveis ignorar deliberadamente). È verdade que nenhum modelo científico pode ser inteiramente completo, dada a infinitude de variáveis que teria de contabilizar. Porém, um modelo científico não pode ignorar deliberadamente variáveis conhecidas (enviesamento voluntário). Se o fizer, não estamos perante ciência, mas sim perante os jogos de ginástica perspectivista de Kuhn, dos construccionistas sociais e de outros assassinos da lógica e da ciência.

«*No scientific model can ever be complete. It will always be partial and contingent. For any model to be complete it would have to take all influential factors into account, no matter how insignificant. Since this is impossible, the scientist must make an arbitrary decision about which ones to ignore. Having ignored some factors, their model is incomplete, although this does not mean it isn't useful*»

“Pós-Humano à vontade com paranormalidade, oculto, cartas, mapas astrais”.

“Renega ‘fé’ no método científico” [é um irracionalista dialéctico]. Sim, é um degenerado irracionalista, cultivado em dialéctica. Portanto, é natural que tema, odeie e manipule o processo científico e abrace charlatanismo em pleno. «*The Post Human is entirely at ease with the ideas of paranormality, immateriality, the supernatural, and the occult. The Post Human does not accept that faith in scientific methods is superior to faith in other belief systems*»

Auto-contradição nihilista sobre a “ultimate nature of the universe”.

“A ‘ultimate nature of the Universe’ não pode ser conhecida”.

“Tudo o que existe é Energia, com qualidades infinitas e perpétuas”.

[I.e. uma apreciação da ‘ultimate nature of the Universe’].

«*The Post Human realises that the ultimate questions about existence and being do not require an answer. The answer to the question "Why are we here?" is that there is no answer… The Post Human abandons the search for the ultimate nature of the Universe… Everything that exists anywhere is Energy. Energy has four properties: That it is everything and everywhere. That it is manifested in an infinite variety of ways. That it is perpetually transforming. That it always has been, and always will be, the above*»

Mais irracionalismo dialéctico [trocar substância por forma para atacar ser humano].

"O Ser Humano só existe enquanto se acredita nele" [confundir forma com substância]. Mais psicose paralógica dialéctica, pela qual *forma* (pensar numa qualidade, ser-se humano) é confundida com *substância* (a existência objectiva de seres que podem ser categorizados como "humanos").

"A crença no Ser Humano torna-se redundante" (Porquê? Quem decide tal coisa?).

Percurso paralógico socrático para chegar à "hive mind".

[Tudo isto baseado na afirmação bastante desavergonhada e nihilista de "verdades objectivas"].

"Nos humanos, conhecimento, inteligência, criatividade, são limitados".

"(Agora falemos de máquinas complexas) são formas de vida emergentes".

"(Agora vamos falar do relativismo na relação entre corpo humano e ambiente circundante)".

"Corpos humanos não têm fronteiras". As mãos com que o autor escreveu o Manifesto são certamente plasma disforme. E, se isto é verdade (se bem que a verdade não conta, aqui), como pode haver a oposição "interno" / "externo"? E para quem escreve o autor? A quem dá aulas, na universidade de Cardiff?

"Não existe divisão entre ambiente, corpo, cérebro".

"Humano é identificável, não definível" (o que é isto senão a definição de um humano?).

"Nada há de externo a humano, que é uno com ambiente" [**relação** não é **identidade**]. Influência mútua não significa identidade. Lá porque duas ou mais entidades estabelecem relações de associação e co-determinação entre si, não quer dizer que sejam a mesma coisa. De acordo com a paralógica do autor, tudo na realidade teria de ser considerado uno e indistinto, porque toda a realidade funciona como um sistema altamente complexo, com um conjunto infinito de conexões, associações, co-determinações ("tudo influencia tudo").

"Temos uma conclusão aparentemente absurda porém lógica". Mas a lógica não estava de fora?

"Mente, corpo e ambiente não podem ser separados – mente e ambiente são interdependentes".

"Humanos e ambiente são meras expressões de energia (em fluxo contínuo, interdependente)".

"Pensamento humano não é hermético, está em fusão com o ambiente".

"Pós-humanos vêem-se a si mesmos como partes de um mundo tecnológico expandido". Hello wireless systems with a seamless transhuman, brainchipped population all thinking in concert. Hello hive mind. Todo este chorrilho de paralogismos e imbecilidades para vender esta ideia.

«*No finite division can be drawn between the environment, the body and the brain. The human is identifiable, but not definable…* We now realise that Human knowledge, creativity and intelligence is ultimately limited… Complex machines are an emergent life form… Human bodies have no boundaries… Consciousness (Mind) and the environment (Reality) cannot be separated. They are integrally linked… *There is nothing external to a human, because the extent of a human cannot be fixed… If we accept that the mind and body cannot be absolutely separated, and that the body and the environment cannot be absolutely separated then we are left with the apparently absurd, yet logically consistent, conclusion that: consciousness and the environment cannot be absolutely separated… Humans and the environment are different expressions of energy. The only difference between them is the form that energy takes… Human thought is not a hermetic system. Since we know that the mind, body and environment cannot be separated we cannot rule out the impact of any environmental stimuli on the process of thought, no matter how minute it might seem… Posthumans…regard their own being as embodied in an extended technological world*» [passage incluída numa versão anterior, de 2005, em VIII.8]

Autoritarismo irracional pós-humano.

"Máquinas serão Deuses, Agentes Inteligentes serão autoridades religiosas nessa religião". Quem são estes Agentes Inteligentes e quem e porquê lhes atribui tal poder? São charlatães devotados a cartas de tarot, búzios, materialismo dialéctico e derivativos? «*In the Posthuman era many beliefs become redundant - not least the belief in Human Being… Human Beings, like Gods, only exist in as much as we believe them to exist… In the Posthuman era machines will be Gods… Intelligent Agents will be the religious authorities of the Information Age. We will ask them to interpret the Chaos of the God machines for us*»

"Surf or die, you can't control the wave but you can ride it". Por outras palavras, a utopia transhumana é um destroço degenerativo autoritário. «*Surf or Die. You can't control a wave, but you can ride it*»

POSTHUMAN MANIFESTO.

Anti-humanitarismo – Anti-igualdade.

Adaptação é o valor supremo.

Nihilismo epistemológico, negação de lógica e ciência.

Em síntese. Pretensious, disconected, nonsensical babble. Banal, medíocre, repleto de falácias infantis. Genocida, manifesto de ódio e desprezo para com o ser humano. Manifesto para a destruição da civilização humana.

«*…humans are no longer the most important things in the universe… All humans are not born equal, but it is too dangerous not to pretend that they are… Surf or die. You can't control a wave, but you can ride it*»

«*Logic is an illusion of human imagination. Truth and falsity do not exist in nature — other than in human thought… The posthuman is entirely open to ideas of 'paranormality', 'immateriality', the 'supernatural', and the 'occult'. The posthuman does not accept that faith in scientific methods is superior to faith in other belief systems*»

PSICOCIRURGIA.

Lobotomia – Procedimento de Freeman.

O paciente era adormecido com electrochoques.

Inserção do picador de gelo. Depois, as pálpebras eram levantadas, e um instrumento como um picador de gelo inserido através do canal lacrimal.

Perfuração do osso craniano. O osso cranial era perfurado com uma pancada no picar, usando um martelo cirúrgico.

Lobomização. Depois, o picador era introduzido no lobo frontal e movido de um lado para o outro para rasgar o tecido.

Lobotomia substituída por ECT e drogas.

Anos 50, declínio de psicocirurgia. Deve-se ao maior uso de electrochoques e drogas psiquiátricas.

Faz, no entanto, um regresso nos anos 70.

Holden – Psicocirurgia – Danos mentais e comportamentais irreversíveis.

Mudanças irreversíveis no temperamento, emoções, humor, e todas as funções mentais mais elevadas.

Mortalidade e sequelas neurológicas graves tanto maiores quanto maior a secção.

"Some patients showed frank clinical deterioration that persisted after operation".

Isto é o relatório de alguém que admira o procedimento como uma fase essencial para descobrir novos métodos de operação.

«*The frequent effect of such over, operation was irreversible change in mood, emotion, temperament, and all higher mental functions. The more extensive the section, the greater likelihood that such symptoms would develop. Postoperative mortality and morbidity, incidence and duration of confusion, urinary incontinence, unequal pupils, facial asymmetry, convulsions, and other neurological sequelae were greater when the section had been more extensive. Excessive weight gain and temporary or permanent changes in performance on the rational learning test and conventional intelligence and*

personality tests after operation were also reported…. Some patients showed frank clinical deterioration that persisted after operation»

J. M. C. Holden [1970, no The American Journal of Psychiatry, reportando mais de 400 casos feitos na área de St. Louis], Associate Professor of Psychiatry and Physician Superintendent of the St. Louis State Hospital Complex. Cit. in Peter R. Breggin (1972). The Return of Lobotomy and Psychosurgery.

Breggin (1972) – Psicocirurgia – Erradicar emocionalidade e funções mentais superiores.

Psicocirurgia destrói tecido neuronal normal para afectar conduta e emoções. «*…psychosurgery is a uniformly damaging operation – exactly what one would expect from mutilating normal brain tissue… In lobotomy and psychosurgery parts of the brain which show no demonstrable disease are nonetheless mutilated or cut out in order to affect the individual's emotions and personal conduct…*»

Objectivo e consequência de psicocirurgia é "to blunt, tame, quiet, sedate, or destroy the individual's unique emotional responsiveness". «*…the basic goal and the basic consequence of psychosurgery are always one in the same – to blunt, tame, quiet, sedate, or otherwise submerge or partially destroy the individual's unique emotional responsiveness… All forms of psychosurgery make the individual more docile…*»

Zonas alvo de lobotomia. Amígdala do lobo temporal; cíngulo; tálamo; hipotálamo e estruturas relacionadas, lobos frontais.

Através de corte, energia ultrasónica, radiação.

O principal alvo destas operações são os lobos frontais.

"These frontal lobes, the highest evolutionary organ in the human being".

Bisturi e "ultrasound electrical coagulations and implanted radium seeds".

"…love, empathy, creativity, abstract thinking, insight, sensitivity, self-awareness, judgment, emotional responsiveness".

«*…the old-fashioned "modified" pre-frontal lobotomy, essentially a mutilating operation in which the surgeon cuts a narrow allee through the midline base of the frontal lobes, partially incapacitating the highest and most refined functions of the human brain and the human being. These frontal lobes, the highest evolutionary organ in the human being, are also being attacked with ultrasound electrical coagulations and implanted radium seeds… Indeed, the frontal lobes are integral to all of man's most sensitive, subtle and human qualities – love, empathy, creativity, abstract thinking… insight, sensitivity, self-awareness, judgment, emotional responsiveness…*»

Mudanças no código moral, redução de inibições morais. «*...reduction of moral inhibitory factors… These modern lobotomists describe considerable changes in the lives of their patients and make facile moral judgments about these changes. One man sold the family business that he never wanted... two couples came to blows for the first time, and three marriages broke up-all of which the authors put their approval upon as signs that the operations made the patients "more open" and "less dependent"... One of their patients became so liberated that he went on to rob a bank*»

Obliterar capacidade de sentir frustração com uma vida vazia. «*...It appears that the lobotomists may be simply obliterating the patient's capacity to respond pleasurably to life, so that the patient doesn't feel frustrated in his empty life*»

Não há justificação para "ajudar" indivíduo através de erradicação do indivíduo. «*There can be no rationale for "helping" an individual by blunting his highest adaptive mechanisms. This method simply hides the individual failure to adapt by partially doing away with the individual's responsiveness... In every case we are dealing with the eradication of symptoms by partially eradicating the individual. To repeat the obvious, improvement in function cannot follow mutilation of the functioning brain*»

Peter R. Breggin (1972). The Return of Lobotomy and Psychosurgery.

Os alvos de psicocirurgia, lobotomia.

Grupos populacionais.

Idosos, mulheres, crianças, pessoas com funcionamento normal.

Prisioneiros, toxicodependentes, pacientes mentais, pacientes neurológicos, epilépticos.

"Perturbações".

Reduzir agressividade, agitação, ansiedade, neurose, fobias, adições, dor.

Os alvos de psicocirurgia, lobotomia – Breggin (1972).

Primeira vaga vitimou 50 mil pessoas apenas nos EUA – pessoas doentes.

Segunda vaga, indivíduos com bom funcionamento.

Mulheres, idosos, crianças, e não só.

Neuróticos, psicóticos, pessoas conscientes e sensíveis.

"A kind of plastic surgery of mental states".

«*The first wave of lobotomy and psychosurgery, which claimed 50,000 persons in the United States alone, was primarily aimed at state hospital patients with chronic disabilities. The current Wave is aimed at an entirely different group – individuals who are relatively well-functioning, the large majority of them with the diagnosis of "neurosis," many of them individuals who are still living at home and performing on the job… Women constitute the majority of the patients, with old people and children as other large groups…*»

Um psiquiatra japonês operava «*on neurotics and psychotics, individuals with "protracted emotional tension states, oversensitivity, excessive self-consciousness, and obsessive states"*», e recomenda «*mutilating the brains of people who are: "delicate, warm-hearted, conscientious, enthusiastic, perfectionistic… A kind of plastic surgery of mental states…*»

Peter R. Breggin (1972). The Return of Lobotomy and Psychosurgery.

Países onde lobotomia é prática corrente – Breggin (1972).

«*Psychosurgery is currently being done in Canada, Australia, France, Spain, Italy, West Germany, Norway, Sweden, Denmark, Finland, Switzerland, Thailand, India, and the world's leaders, Japan, England and the United States…*»

Peter R. Breggin (1972). The Return of Lobotomy and Psychosurgery.

Breggin (1975) – Psicocirurgia para fins políticos.

Psicocirurgiões procuram psiquiatrizar dissidência política.

Prática análoga a prática soviética. «*...several of the nation's leading psychosurgeons have persistently linked their work to the control of urban violence, ghetto disorders and political dissent… They began with a political issue of grave national concern, the inner-city uprisings of 1967 and 1968, and then attempted to redefine it as a medical disease or syndrome to justify their own interventions. This is analogous to the Russian practice of redefining political dissent into psychiatric categories in order to subject the dissenters to psychiatric authority and treatment*»

A psicocirurgia tem um efeito subjugador e domesticador. «*Psychosurgery has a blunting or subduing effect unrelated to the presence or absence of disease in the brain and regardless of the individual's personality, character or psychological problems; it will "tame" humans and animals alike whatever their physical or mental state*»

Psicocirugia aplicada para fins políticos. «*...psychosurgery continues to be practiced and developed, and a resurgence of interest in its political applications may await us the moment we consider it an issue of the past*»

“…surgery might zero in on "leaders" of insurrections… for victim's "own good”. «*Then, as Sweet declared to a legislative committee, the surgery might zero in on the "leaders" of insurrections. I can think of no more effective and permanent method of rending a leader impotent. From a propaganda viewpoint, it surpasses outright killing as a method of control for it leaves the person physically alive and can be justified "on medical grounds" and for the victim's "own good.”*»

“Mark, Ervin, Sweet and Delgado… a package deal combining police and mental functions, a political step toward psychiatric totalitarianism”. «*Mark, Ervin, Sweet and Delgado have not only preached a philosophy of therapeutic totalitarianism, they have joined together to impose their ideas upon individual human beings through federally financed medical experimentation. By words and deeds alike these psychosurgeons have assaulted political liberty and personal freedom… we have a package deal combining police and mental functions, a political step toward psychiatric totalitarianism*»

A linguagem do psico-totalitarismo para controlo humano. «*This is the language of psychiatric totalitarianism- cost effectiveness in human control through psychiatric technology*»

Peter R. Breggin, M.D. (1975). Psychosurgery for Political Purposes. Duquesne Law Review, Vol. 13.

“Dissidência e violência têm de ser tratadas com lobotomia”.

“Disfunções cerebrais provocam dissidência, protestos, violência, motins”. Por exemplo, uma carta no Journal of the American Medical Association, em 1967, “Role of Brain Disease in Riots and Urban Violence”, associava «*arson, sniping, and physical assault*» a «*brain dysfunction*» e apelava a um screening em massa da população para descobrir e tratar pessoas com disfunções cerebrais, antes de rebentar em desordem urbana. [Letter from F. Ervin, V. Mark & W. Sweet to the *Journal of the American Medical Association,* in 201 J.A.M.A. 895 (1967)] A ideia central destas pessoas [Mark, Ervin, Sweet, Delgado, Rodin e outros] era a de que disfunções cerebrais estavam por detrás de protestos sociais e motins urbanos.

10M-20M de americanos cerebralmente danificados. Numa instância, numa carta publicada na Science, era dado um número astronómico de americanos de americanos cerebralmente danificados, com doenças cerebrais – 10M a 20M – que poderiam, portanto, vir a causar violência.

Qual a solução para estas doenças cerebrais? Lobotomia.

Ou seja, destruir o cérebro para curar *o cérebro*.

Referências cit. in Peter R. Breggin, M.D. (1975). Psychosurgery for Political Purposes. Duquesne Law Review, Vol. 13.

Rodin – Lobotomizar e castrar para produzir "placid dullards".

Ernest Rodin, neurologista responsável pelo projecto da Lafayette Clinic.

"Tolerância e pensamento livre têm de ser desencorajados". «*Tolerance and encouragement of free thought is probably excellent for the high IQ bracket, but not advisable for the lower one, and one is reminded of the Roman saying: "Quod licet Jovi non licet bovi" (What is allowed for Jupiter is not allowed for the ox). The problem is that the ox may not recognize himself as an ox and demand Jupiter's prerogatives*»

Advoga acção directa sobre indivíduos apontados como críticos. «*We much prefer to talk in global abstractions on a sociological basis, where millions and billions of dollars can be poured into ill-conceived do-good projects which can be readily stopped by another administration, rather than get down to cold-blooded medical research dealing with individuals rather than masses*»

Advoga psicocirurgia e castração, ou esterilização, para classes baixas. «*Farmers have known for ages immemorial that you can't do a blasted thing with a bull except fight or kill and eat him; the castrated ox will pull his plow; try to ride a young stallion and you will gladly settle for a gelding or a mare. It is also well known that human eunuchs, although at times quite scheming entrepreneurs, are not given to physical violence. Our scientific age tends to disregard this wisdom of the past…*»

"O resultado de psicocirurgia e castração são estúpidos plácidos e promíscuos". «*As a result [of the psychosurgery], the now hopefully more placid dullard can insemminate other equally dull young females to produce further dull and aggressive offsprings*»

Depois, Rodin ridiculariza conceitos bíblicos de respeito pelo indivíduo.

Ernest Rodin, cit. in Peter R. Breggin, M.D. (1975). Psychosurgery for Political Purposes. Duquesne Law Review, Vol. 13.

Walter Freeman – Lobotomia tem de destruir indivíduo.

O mais experimentado psicocirurgião do mundo.

Presidente Honorário da International Association for Psychosurgery.

"É bom danificar capacidade intelectual do neurótico – ele pensa demasiado". Freeman e Watts (1950) e Freeman (1959) sugerem que é bom danificar a capacidade intelectual do neurótico, já que o neurótico pensa demasiado (p. 1526).

"Uma boa operação danifica afecto egóico, sem perturbar inteligência, memória, personalidade". Freeman (1965) concorda com muitos lobotomistas e psicocirurgiões modernos, quando diz que o melhor resultado é o dano das emoções. «*A successful*

operation bleaches the affect [emotions or feelings] attached to the ego, without disturbing intelligence, memory, or personality functions» (p. 158).

“Perde-se capacidade de introspecção, especulação, reflexão, auto-reflexão”. Walter Freeman (1959) diz-nos que, com lobotomia, a criatividade é reduzida ao mínimo denominador comum. «*What the investigator misses the most in the more highly intelligent individuals is the ability to introspect, to speculate, to philosophize, especially in regard to the self*» (p. 1526).

“A criatividade é a mais elevada forma de empreendimento humano”.

“Tem de ser abolida pela lobotomia”. «*Creativeness seems to be the highest form of human endeavor. It requires imagination, concentration, visualization, self-criticism, and persistence in the face of frustration, as well as trained manual dexterity… Theoretically, on the basis of psychologic and personality studies, creativeness should be abolished by lobotomy… On the whole, psychosurgery reduces creativity, sometimes to the vanishing point*» (p. 1534-5).

The American Handbook of Psychiatry (1959), cit. in Peter R. Breggin (1972). The Return of Lobotomy and Psychosurgery.

PSICOTRÓPICOS – Generalização, para ambiente estéril.

Ambiente social estéril e inumano.

Consciência, sentimentos. Neutralização da consciência moral e desconexão de sentimentos reais. Apatia. Manipulabilidade.

Bloquear racionalidade.

Psychotronic warfare – “The Mind Has No Firewall”.

Controlo tecnotrónico do cérebro.

Incapacitar mente humana. 'The Mind Has No Firewall': Guerra psicotrónica. Utilizar meios electrónicos para incapacitar a mente humana.

Capacidades – NATO, URSS. Citação de capacidades, tanto do lado NATO como do lado soviético.

Psychotronic warfare – Autismo induzido e alteração cerebral e mental.

Através de campos EM. A criação de um campo EM, através de estimulação magnética transcranial, junto da junção temporal-parietal direita prejudica a capacidade de distinguir certo de errado, e os julgamentos morais voltam a um nível infantil, com ausência de teoria da mente. Esta técnica cria, consequentemente, lesões virtuais no cérebro. [Modern technology is changing the way our brains work, says neuroscientist]

BM

RAY KURZWEIL – AI global, implantes neuronais, castas tecno-eugénicas.

Prevê uma série de serviços interactivos, como iTunes, YT. Previu com sucesso a chegada do iPad, do Kindle, do iTunes, do YouTube, e de serviços on demand como o NetFlix.

Governo mundial, planeta gerido por sistemas globais AI. Já por 2099, todo o planeta é gerido por sistemas AI mais inteligentes que toda a raça humana combinada – um sistema global similar ao Skynet, da franchise "Terminator".

Evolução guiada. Evolução biológica é demasiado lenta, e será substituída por evolução guiada.

Extensões de vida, vida eterna. Atrasar envelhecimento, extensões de vida resultantes de bio e nanotecnologia, vida eterna.

"Máquinas espirituais" – AI. Com AI, fusão homem-máquina e por aí fora.

"Singularidade" [fusão homem-máquina]. Os humanos fundem-se com máquinas, por forma a gerar a Singularidade.

Os ciborgues transhumanos e a "subclasse humana". Kurzweil antecipa que, por 2019, smartphones "vestíveis" (wearable) vão estar no topo da tecnologia disponível e que, por 2029, as pessoas vão ter múltiplos implantes cognitivos e sensoriais, o que vai dar origem a uma "subclasse humana", vista como retrógrada e não-produtiva, dado que recusa a aquiescer à singularidade. Humanos que se recusem a alterar-se a si mesmos, tornando-se semi-ciborgues, serão ostracizados da sociedade.

"Uso ubíquo de implantes neuronais – humanos que se recusam são ostracizados". «*Even among those human intelligences still using carbon-based neurons, there is ubiquitous use of neural implant technology, which provides enormous augmentation of human perceptual and cognitive abilities. Humans who do not utilize such implants are unable to meaningfully participate in dialogues with those who do*» [Ray Kurzweil (1999). "The Age of Spiritual Machines"]

RAY KURZWEIL.

Governo mundial.

Evolução guiada. Evolução biológica é demasiado lenta, e será substituída por evolução guiada.

Extensões de vida, vida eterna. Atrasar envelhecimento, extensões de vida resultantes de bio e nanotecnologia, vida eterna.

"Máquinas espirituais". Com AI, fusão homem-máquina e por aí fora.

Singularidade – Homem funde-se com universo e torna-se deus. O homem vai tornar-se um deus, através da fusão com a natureza.

Realidades virtuais.

Aclimatização a realidades imaginárias – alienação, escapismo. O próximo passo para além das redes sociais vão ser as realidades alternativas, virtuais. As pessoas já estão a ser aclimatizadas ao conceito de preferir realidades virtuais em vez do mundo real.

Artigos. 'Exodus' to virtual worlds predicted; Sony Brings Real Life Matrix A Step Closer; US Airforce-Each Recruit gets Digital Copy-of Himself

RITALINA – Intervenção sobre milhões de crianças pequenas.

Anos 50, NIMH. Com relação a tudo isto, nos anos 50, o NIMH começa um programa onde escolas públicas administram Ritalina a crianças classificadas como «*dull*» e «*emotionally disturbed*».

BSTEP. Ficamos a saber que a experimentação química com menores se tornaria um lugar-comum, na escola do futuro próximo.

Gallagher, "Skinnering the Taxpayers". «*We disclosed in 1970 that at least 250,000 American grammar school children are receiving behavioral modification drugs, most often the amphetamines or 'speed' as they are commonly called*» – Rep. Cornelius Gallagher (NJ), "Skinnering the Taxpayers", Speech to the U.S. House of Representatives.

"Não-tratamento significa abuso parental". A 14 de Junho de…, o Christian Science Monitor reportava que um psicólogo escolar tinha dito a Patricia Weathers, uma mãe nova-iorquina, para dar ritalina à sua criança. A criança começou a exibir reacções psicóticas – um efeito secundário bastante típico – e a mãe resolveu parar com o tratamento. Em resposta, a escola reportou-a por abuso parental, aos serviços de protecção de crianças.

Números actuais nos EUA. Vários milhões, de acordo com o Bioethics Committee to the President.

Ritalina e Aderall são anfetaminas – speeds – a crianças pequenas. ...e, sem dúvida. Ritalina, Aderall. I.e., anfetaminas. Noutros meios, e noutros contextos, conhecidas como speeds. E são dadas em massa, a crianças pequenas.

SINGULARIDADE – A mente mundial – Homem Natural, fundido com Natureza.

TH – Do cérebro individual à Mente Mundial.

O cérebro é o melhor de todos os computadores. O cérebro é o melhor computador existente. Tem muito espaço livre e poder computacional.

Despersonalização e ligação em rede permite Mente Mundial. Se for utilizada tecnologia para remover identidade e vontade individual, e para colocar milhões de cérebros humanos a trabalhar em rede, numa espécie de super-Internet, o que se obtém é uma Mente Mundial muito poderosa, um super-sistema de rede.

Corpos programados para funções. No entretanto, os corpos humanos podem ser programados para trabalhar em funções, sem qualquer consciência do facto. Simples.

Em inglês. «*You know, your brain is actually the best computer there is. Lots of space and computing power there. If you use technology to remove identity and free will, and to get several millions of human brains working together on a super-Internet type system, you then get a very powerful World Mind/Computer. Meanwhile, the human bodies are prompted to work away at functions, literally mindless. Simple*»

SINGULARIDADE – Fusão dos três níveis da Natureza – o Homem Natural.

Natureza – Inorgânico, biológico, humano. A natureza tem três níveis de existência: inorgânico, biológico, humano – sociedade humana. Composta de pessoas que se organizam em sociedade; dotadas de poderes racionais complexos; e de consciência moral, que lhes dá poder de escolha entre bem, e mal.

Grande Obra, a integração destes três níveis – "Homem natural". A Grande Obra consiste na fusão e na integração destes três níveis. O grande propósito é criar o homem natural, o "homem da natureza".

Encontrar comunalidades – Descer ao MDC. Para isso, encontram-se os pontos em comum, as comunalidades, entre os três níveis. O primeiro nível é natureza morta. O segundo nível é natureza automatizada por impulsos e programação genética. Resultados programáticos da interacção entre uma codificação genética e um ambiente – exploração do ambiente. O terceiro nível é animado por escolha racional e moral. Portanto, como se encontram os pontos em comum? Começa por se rebaixar, degradar, o terceiro nível, ao nível do segundo; alma é substituída por comportamento programático, impulsivo, sensualizado. Depois, é preciso encontrar pontos comuns entre este humano animalizado, e natureza morta. Isso não significa matar biologicamente o ser humano; mas sim fundi-lo com a natureza morta. Obter simbiose entre

funcionamento biológico e a natureza morta, criar interdependência. Um primeiro passo nesta direcção é óbvio: tornar o ser humano dependente do material; a vida depende do material, do materialístico.

Simbiose completa – O círculo completo. Mas o círculo só é completo quando existe plena simbiose, e isso significa que o ser humano foi efectivamente fundido, corporeamente, com o inorgânico. Por exemplo, um cérebro alterado com próteses baseadas em silício, silicone. “Chips cerebrais”.

A mente global, Singularidade. A fusão plena é dada pela singularidade transhumana, onde os três níveis ganham plena consciência de Si, e de Tornar-se, numa única mente unificada, global, transhumana, transbiológica, trans-inorgânica. A Grande Obra – pelo menos ***esta*** fase da Grande Obra.

SINSHEIMER [HGP] – Engenharia genética, a nova eugenia.

[Dr. Robert Sinsheimer – University of California – Human Genome Project].

Modificação genética humana, guiada e orientada.

Horizontes da nova eugenia são infinitos – criação de novos genes e características.

Transição para um novo caminho de evolução... um evento cósmico.

«*…the possibility of human genetic modification… designed genetic change, specifically of mankind… For the first time in all time a living creature understands its origin and can undertake to design its future… The horizons of the new eugenics are in principle boundless-for we should have the potential to create new genes and new qualities yet undreamed… We can be the agent of transition to a wholly new path of evolution. This is a cosmic event*»

Robert Sinsheimer (1969). "The Prospect of Designed Genetic Change". E&S, 32(7), 8-13.

TRANSHUMANISMO – Genética – Designer humans – Tecno-eugenia.

TATUM (60s) – Engenharia genética humana está perto.

Rockefeller, Nobel. Prof. Edward L. Tatum, Instituto Rockefeller, prémio Nobel. [Cit. in Gordon Rattray Taylor (1968). "The Biological Time Bomb"]

Manipulação genética humana e engenharia biológica estão perto. «*...podemos antever… a manipulação perfeitamente intencional de alterações genéticas mesmo no homem*». A engenharia biológica virá «*talvez mais cedo do que se prevê*»

TRANSHUMANISMO – Julian Huxley – Tecno-eugenia.

Julian Huxley, Sociedade Eugénica criam o TH (60s) – Tecno-Eugenia. Hoje em dia, os eugenistas esperam dar o seu grande salto em frente através do uso de alta tecnologia. Nos anos 60, Julian Huxley e a Sociedade Eugénica criaram o movimento transhumanista, que visa utilizar avanços tecnológicos para criar super-humanos. Por outras palavras, tecno-eugenia. A ideia era alterar a biologia humana e combinar a biologia humana com alta tecnologia, por forma a criar humanos que já não sejam humanos, mas sim putativos semi-deuses.

Genética, robótica, nanotecnologia. No início do século 21, a concretização desse objectivo parece cada vez mais próxima. A carga é liderada pelos campos da genética, da robótica e da nanotecnologia, que foram dominados desde o início por eugenistas e por transhumanistas.

TRANSHUMANISMO – Human Genome Project. O Human Genome Project, um projecto de biliões de dólares, é obviamente parte deste esquema de coisas.

Antes de adulterar, é preciso conhecer e mapear.

GENÉTICA – A mentalidade dominante.

Testes genéticos para decidir carreiras, na China. [In China, DNA tests on kids ID genetic gifts, careers]

"Homens inteligentes têm melhor esperma". [Intelligent men have better sperm – research; Intelligent 'have better sperm']

"DESIGNER HUMANS" – Processo de fabrico.

Fabrico é o termo aqui.

Eugenia experimental regressa nos anos 70. Bebés-proveta, inseminação artificial, e por aí fora.

IVF – Inserção de genes no embrião – Gestação. A geração e o design de bebés acontece em clínicas de fertilidade, onde futuros pais passam por um procedimento IVF (in vitro) para criar um embrião, e depois seleccionar os traços físicos, cognitivos, e comportamentais desejados para esse filho. Depois, os técnicos inserem, no embrião, os genes respectivos que produzem esses traços, e implantam o embrião no útero materno. Nove meses depois, nasce um bebé desenhado.

Artigos. Designer babies - Creating the perfect child; The Future of Babies - Artificial Wombs and Pregnant Grandmas; "Sex will not be used to have babies in just 10 years, as couples turn to IVF".

"DESIGNER HUMANS" – Apelo a egoísmo e a vaidade humana.

O "sales pitch". Como sempre, começa por ser vendido pelo apelo à vaidade humana. Pais podem adulterar o genoma dos filhos, para criar o suposto bebé perfeito.

Apenas o "bebé perfeito" é merecedor de vida. Isto é um poderoso reforçador da mentalidade de que apenas um bebé "perfeito" – o que quer que isso seja – é merecedor de vida.

Tratar crianças como produtos à medida do egoísmo parental. O horror de tratar crianças como se fossem bonecos, que podem ser alterados e adulterados a pedido, produtos feitos à medida do egoísmo dos adultos.

"DESIGNER HUMANS" – Modificar áreas funcionais humanas.

Aumentar resistência a doenças.

Modificar variáveis físicas. Optimizar altura e peso, desenhar novas formas corporais.

Modificar variáveis psicológicas. Como a personalidade, ou a inteligência.

Estender esperança de vida.

"DESIGNER HUMANS" – Caixa de Pandora é aberta e legitimada.

Fábricas de bebés, soldados alterados, escravos subhumanos. A partir daqui, estados e grupos económicos podem criar os seus próprios soldados alterados, escravos subhumanos, e tudo o resto. É legítimo. Se o cidadão comum é burro o suficiente para aceitar que isso seja feito às novas gerações, porque é que o estado ou as multinacionais não teriam o mesmo direito?

"DESIGNER HUMANS" – Humanos por medida – Híbridos e quimeras.

Criação de humanos feitos por medida – para funções. A ideia é ter pessoas custom-made para um dado tipo de função. Por ex., um burocrata seria dotado de QI maior. Um polícia, de QI baixo, carácter agressivo, e força física considerável. Um trabalhador manual, idem aspas, mas passivo.

Inúmeras experiências durante a última década.

Artigos. Animal-Human Hybrids Spark Controversy; Chimera research, mice, men, and monsters; Embryos Created With DNA From 3 People, Scientists Say; Green light for hybrid research; 'Human-animal' embryo green light; Scientists Mix Human and Animal Cells, Hybrid Causes Ethical Concerns; Three parents produce one embryo; UK's first hybrid embryos created

TECNO-EUGENIA – A Utopia eugénica – "Era pós-humana".

Futuro **pós-humano** – controlo tecnológico da evolução humana.

Governo planetário. Tema recorrente, desde Julian Huxley, que disse que isto seria necessário para guiar o processo evolutivo.

Corporações com patentes genéticas. No futuro tecno-eugénico antecipado, seres humanos serão modificados por corporações que vão possuir todas as pequenas partes do genoma humano.

Singularidade [o nível de significado mais elementar]. A noção de que os humanos vão eventualmente fundir-se com máquinas, com a concretização da singularidade tecnológica é partilhada por virtualmente todos os futuristas de topo.

Espécie divide-se entre GenRich, Naturals, ciborgues, quimeras.

Desigualdade sem precedentes. Todos nós aprenderemos a tolerar desigualdade sem precedentes entre os geneticamente "avantajados" e "desavantajados".

Redução populacional. Num futuro em que automatização é tudo, as massas de "população excedentária" não serão necessárias. Aí, o que acontece ao "excedente de população"?

Ciborgue – Andróide biológico – Borg. O homem mecânico do futuro é uma peça na máquina tecnotrónica da sociedade, uma célula do Borg.

"Imortalidade" – "A fonte da juventude". Crença transhumanista de que a fusão do homem com a máquina, e a sua alteração biológica, são as chaves para a imortalidade.

Artigos. Genetic Advances To Pioneer Super-Human Elite; Newsclip - human species may split in two, LSE; Bill Joy: "Why the future doesn't need us"

TECNO-EUGENIA – Hubris – Tecnocracia – Pós-democracia.

Hubris e determinismo científico. Os tecno-eugenistas acreditam que a natureza humana está escrita no DNA e pode ser reescrita por engenheiros genéticos em nome de uma utopia eugénica. Para alguns cientistas, o incentivo da capacidade técnica de "melhorar" o DNA humano corresponde à sua inevitabilidade.

Utopianismo tecnocrático é uma marca pós-democrática. São motivados pelo utopianismo tecnocrático típico em eugenistas, sob a bandeira de alcançar a "perfeição" humana. Este tecno-utopianismo é especialmente sedutivo numa era na qual os valores e visões da era democrática são vistos como apagados e desvanecidos.

Desafio óbvio a direitos humanos, dignidade humana.

TECNO-EUGENIA – Um paradigma institucional.

Tecno-eugenia subscrita por Nóbeis, bioeticistas, etc. A agenda de Silver é partilhada por um número perturbador de cientistas laureados com o Nobel, de empreendedores biotech, teóricos sociais, bioeticistas e jornalistas.

Também por governos pós-democráticos, como a EU. EU advises on posthuman cyborg future

TECNO-EUGENIA – "Aperfeiçoar humanidade" – Impulso barbárico, genocida.

Historial de horrores e um futuro condizente. Esta questão, de aperfeiçoar a humanidade, é o impulso barbárico que provocou os maiores horrores dos últimos 200 anos e ameaça provocar muitos mais horrores, nos próximos 100 anos.

VOLTAR AO ÉDEN – Construir Paraíso na Terra – Singularidade.

Voltar ao Éden – Construir Paraíso na Terra.

No processo histórico, homem obtém promessa da serpente, ser como Deus (Fromm).

Um livro intitulado "sereis como deuses", seguindo a aliciação da Serpente.

A serpente histórica, a espiral. «*In the process of history man gives birth to himself. He becomes what he potentially is, and he attains what the serpent — the symbol of wisdom and rebellion — promised, and what the patriarchal, jealous God of Adam did not wish: that man would become like God himself*» – Erich Fromm (1969). You Shall Be As Gods: a radical interpretation of the Old Testament and its tradition. Fawcett Premier.

Pecado original tem de voltar a ser cometido – estado de inocência, utopia (Marcuse). «*...man would order his life in accordance with his fully developed knowledge, so that he would ask again what is good and what is evil... If the guilt accumulated in the civilized domination of man by man can ever be redeemed by freedom, then the 'original sin' must be committed again: 'We must again eat from the tree of knowledge in order to fall back into the state of innocence."*» – Herbert Marcuse (1987). Eros and Civilization: A philosophical inquiry into Freud. Routledge.

Prometeu, o símbolo da emancipação – Utopia (Bronner). «*Human choice has produced the fall and, with the expulsion of Adam and Eve, the hope of re-creating paradise. Prometheus may have sought to make good on that hope, but he was thwarted for all eternity by a "wicked god" bent on condemning human hubris. Hope becomes fused with the recognition that its fulfillment will never take place. Thus, utopia serves as the only response to alienation*» – Stephen Eric Bronner (2002). Of Critical Theory and Its Theorists. Routledge.

Voltar ao Éden – Singularidade.

Singularidade, reconciliação com a natureza – animais, plantas, minerais (Habermas). «*...a concept of truth [inquérito? – tem de ser progressivamente extendido à universalidade] that can be interpreted via the guiding idea of a universal reconciliation, an emancipation of man through the resurrection of nature; a reason that pursues its aim of discovering truth will, by being the instrument of reconciliation... in such a way that the idea of truth is connected with that of a universal reconciliation— where reconciliation includes the interaction of human beings with nature, with animals, plants, and minerals*» – Jürgen Habermas (1987). "The Theory of Communicative Action: Reason and the rationalization of society". Beacon Press.

<u>VÍDEO – Brainchips</u>.

MORENO – Psyops – Brainchips.

<u>PSYOPS – Now devoted to getting into the mindset of prisoners, targets</u>.

(JM) psyops, deception detection (Psychological operations historically devoted to make people feel they were in a competition they couldn't win. Now, psyops is more devoted to getting into mindset of prisoners/targets. How does the brain look when it's engaging in deception)

<u>BRAINCHIPS – Operadores chipados controlam remotamente drones e robots</u>.

(JM) robotic army, robot drones, brain chips (Putting an operator, safe in a bunker, piloting a drone, a robot army. We're going past the drones, we're going towards direct neural implants, with feedback flows to and fro the machine)

<u>BRAINCHIPS – Humanos, nódulos na Internet – Recepção mais fácil que transmissão</u>.

(JM) brainchips (Brain machine interaction. Tornar os humanos em nódulos na Internet. Com recepção e transmissão imediatas. Recepção mais fácil que transmissão)

CUDDY – Brainchips – Whitehall Institute – Get chipped for your job.

dennis cuddy - brainchip1 (Neural chip implant, Soledad Prison – audio and video record, back off, be more amenable to orders, and so on – Whitehall Institute – Interacção cérebro-casa electrónica, e por aí fora – little experiments with mice too – Economic incentive, get chipped for your job – And then they'll be able to monitor you through the chip, and cause you to do this, that and the other, through the chip and so on)

<u>VÍDEO – Genética – Transhumanismo</u>.

WATT – Genetics is eugenics; will not be used for the good of the people.

(**AWnewh – 44:25**) Genética é eugenia. A genética não será usada para o benefício do resto da humanidade, apesar de ser paga com o nosso dinheiro. Todos os geneticistas são eugenistas. No começo do treino de universidade tornam-se true believers em eugenia.

AJ – "Eugenics, a religion of DNA, pop redux, genetic engineering, life extension"

AJ4 – eugenics, middle class, psychos hijacking human destiny – eugenics2 (AJ4 – 00:45) You have a criminal ruling class that have made a religion out of understanding how human beings operate, and what makes people tick, a religion out of manipulating the population. A religion out of the elite passing their power on, generation after generation – that's what royalty is. A religion out of self-worship, where they believe they are the chosen ones, and not only that they will find a way to dominate the planet through genetic engineering and bioweapons, but they will find a way to extend their lives, through the life extension technologies of genetic engineering.

AJ3 – eugenics, middle class, psychos hijacking human destiny – eugenics1 (**AJ3 – 00:00**) This is a religion of DNA, this is a eugenics cult. Everything is race, everything is genetics. Everything is your genealogy and who you came from. (AJ – 3:35) You think these control freak rich elitists...? They hate your guts when they go to public places and see you, they hate your guts when watching you living in nice house. And admittedly society as always been trashy, and always had problems, but they've done everything they can to make us more dumb, more trashy. And I talk to yuppies, they go yeah, you go to a waterpark or a gym, you look at all the dumb trash everywhere, maybe it's a good idea to get rid of them. What you don't understand is the elite actually wants to get rid of you number one. If you got a high IQ, they want you dead number one. They want you co-opted or dead.

World Drug Report 2012 – SSRIs e estimulantes.

World Drug Report 2012 – Sedativos, ansiolíticos.

SSRIs, usados para o tratamento de perturbações da ansiedade.

Risco de overdose letal – 2ª droga mais letal após os opiáceos.

Países mais drogados – Bélgica, Uruguai, Portugal, Sérvia.

«*Central nervous system depressants... Central nervous system depressants are usually prescribed as sedatives or anxiolytics (for the treatment of anxiety disorders). Benzodiazepines are currently the main substances of concern in this class of drugs, having largely replaced barbiturates (both are used as anxiolytics and sedative-hypnotics) because barbiturates carry a higher risk of lethal overdose. These drugs have a high rate of representation in drug-related deaths (second only to opioids) and they are misused in many countries. The countries that report the highest per capita consumption of benzodiazepines — regardless of whether for sedative, anxiolytic or anti-epileptic purposes — are (in order of magnitude) Belgium, Uruguay, Portugal and Serbia.101 Some of the commonly misused benzodiazepines are flunitrazepam (marketed as Rohypnol,102 used as a sedative) and diazepam (marketed as Valium, used as an anxiolytic)*»

World Drug Report 2012 – Estimulantes.

Usados medicamente para tratar narcolepsia, ADHD.

Podem levar a arritmia, febres, falha cardiovascular, ataques.

Países mais afectados – EUA, Argentina, Brasil, México, Chile.

Só nos EUA, prescrições saltam de 5M em 1991 para 45M em 2010 (+900%).

Isto está ligado a fenómeno da Ritalina.

«*Stimulants… The third class of frequently misused prescription drugs is stimulants. The medical use of stimulants has decreased in recent years, though they are still prescribed for the treatment of attention deficit disorder and narcolepsy. In addition to the risk of dependency, non-medical use of stimulants may lead to heartbeat irregularities, elevated body temperature or even cardiovascular failure and seizures. A number of drug use surveys have indicated that prescription stimulants are frequently misused in the Americas. The use of prescription drugs well above the global average over the period 2007-2009 was reported by the following countries (listed in order of*

magnitude): the United States, Argentina, Brazil, Mexico and Chile. In South America, in particular, stimulant use is often linked to weight loss efforts. The problem is not confined to that region, however, as countries in all major regions have reported relatively high levels of consumption of stimulants. Some countries have seen dramatic increases in the availability of prescription stimulants. In the United States, for example, the number of prescriptions for these drugs increased from 5 million in 1991 to nearly 45 million in 2010. This is linked, inter alia, to increased prescription of methylphenidate (marketed as Ritalin), a drug used to treat attention deficit disorder. Consumption of methylphenidate is much higher in the United States than at the global level, though global consumption of that substance has increased significantly over the past decade»

BM

WOZNIAK – A ascensão das máquinas humanas – Humanos serão "pets".

Ascensão da Singularidade – máquinas humanas. Singularidade – uma máquina que tem aspecto humano, sentimentos, pode pensar e ser motivada. I.e., Replicants. Começam por ser sociopatas, alicerçados em egoísmo racional, mas podem aprender e desenvolver-se.

AI assume controlo, *como por acidente*, humanos tornam-se animais de estimação.

"Já estamos a criar os seres superiores, vamos ser os animais de estimação".

"As máquinas vão fazer as tarefas cognitivas de ordem superior".

"Quando isso estiver feito, haverá muito pouca necessidade de humanos".

«*We're already creating the superior beings, I think we lost the battle to the machines long ago… We're going to become the pets, the dogs of the house… Every time we create new technology we're creating stuff to do the work we used to do and we're making ourselves less meaningful, less relevant… Why are we going to need ourselves so much in the future? We're just going to have the easy life… You don't realise it's happened until it's there and I think that awareness of machines is getting very, very close and we're getting close to where a machine will really understand you… My comment about the machines winning the war is partly a joke, but we've accidentally already put so much in place that we can't get rid of from our lives… Once we have machines doing our high-level thinking, there's so little need for ourselves and you can't ever undo it – you can never turn them off*» Steve Wozniak, co-founder of Apple Computers to a business congress, cit. in "Humans become 'pets' in rise of the machines: Apple co-founder", Tony Bartlett, The Age, June 6, 2011.

WS BAINBRIDGE – World government – Species turned into docile organisms.

Governo global totalitário.

Engenharia genética, drogas psicoactivas, electrocontrolo do cérebro.

Transformação da espécie em organismos dóceis e domesticados.

«*Electronic communication and rapid transportation make possible a stifling world government. Techniques such as genetic engineering, psychoactive drugs and electronic control of the brain make possible a transformation of the species into docile, fully-obedient, "safe" organisms*»

William Sims Bainbridge [Deputy Director of the National Science Foundation, Paper given at the Nineteenth Goddard Memorial Symposium of the American Astronautical Society, Virginia, March 26-27, 1981]. *In* American Astronautical Society (1982) "Science Fiction and Space Futures: Past and Present", Eugene Morlock Emme (Ed.), pp. 187-201, Univelt.